

November
2019

Ørsted
Community
Newsletter

**Hornsea
One and Two
Offshore
Wind Farms**



Welcome to the latest community newsletter for Hornsea One and Two.

Construction of both Hornsea One and Two is progressing well and I am delighted to be able to report that we have completed the offshore installation of all turbines on Hornsea One in just nine months. Hornsea One is already the world's largest offshore wind farm and we are well on track for completion in 2020.

We have reached a number of important agreements for Hornsea Two with key local suppliers for offshore construction components, reaffirming our commitment to the local supply chain.

Beyond construction activity, we are continuing to support the wider community through our East Coast Community Fund and we were delighted to sponsor this year's hugely successful Great Grimsby 10k.

Duncan Clark
Programme Director, Hornsea One and Two

About Ørsted

We are a renewable energy company with the **vision to create a world that runs entirely on green energy**. Climate change is one of the biggest challenges for life on earth; we need to transform the way we power the world.

We have invested significantly in the UK, where we now develop, construct and operate offshore wind farms and innovative biotechnology which generates energy from household waste without incineration.

Over the last decade, we have undergone a truly green transformation, halving our CO₂ emissions and focusing our activities on renewable sources of energy.

We want to revolutionise the way we provide power to people by developing market leading green energy solutions that benefit the planet and our customers alike.

Where are the Hornsea offshore wind farm projects?



- Hornsea One and Two
- Hornsea Three
- Proposed location of Hornsea Four
- Operational Ørsted offshore wind farms

Hornsea One is located 120 km from the Yorkshire coast and is the final stages of construction offshore. Hornsea Two is adjacent to Hornsea One and will be situated 89 km from the coast.

Hornsea Three is currently in its development and planning stage and will connect into the national grid in Norfolk. To find out more, please visit: www.hornseaproject3.co.uk

Hornsea Four has recently undertaken pre-application consultation and is due to submit a Development Consent Order (DCO) application in 2020. For further information on the proposals, please visit: www.hornseaprojects.co.uk/Hornsea-Project-Four

Hornsea One offshore wind farm



Hornsea One has a capacity of 1.2 GW



It will provide enough power for well over 1 million homes



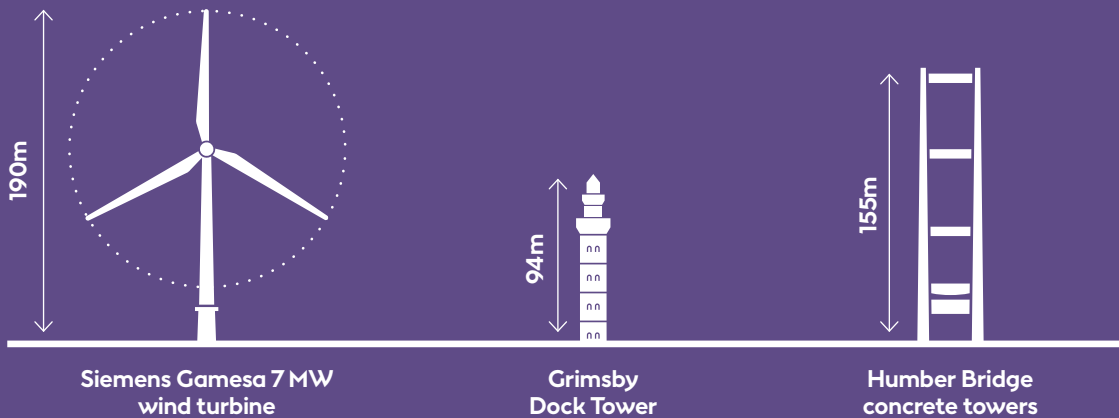
The wind farm is as far away from shore as Hull is from Hartlepool as the crow flies



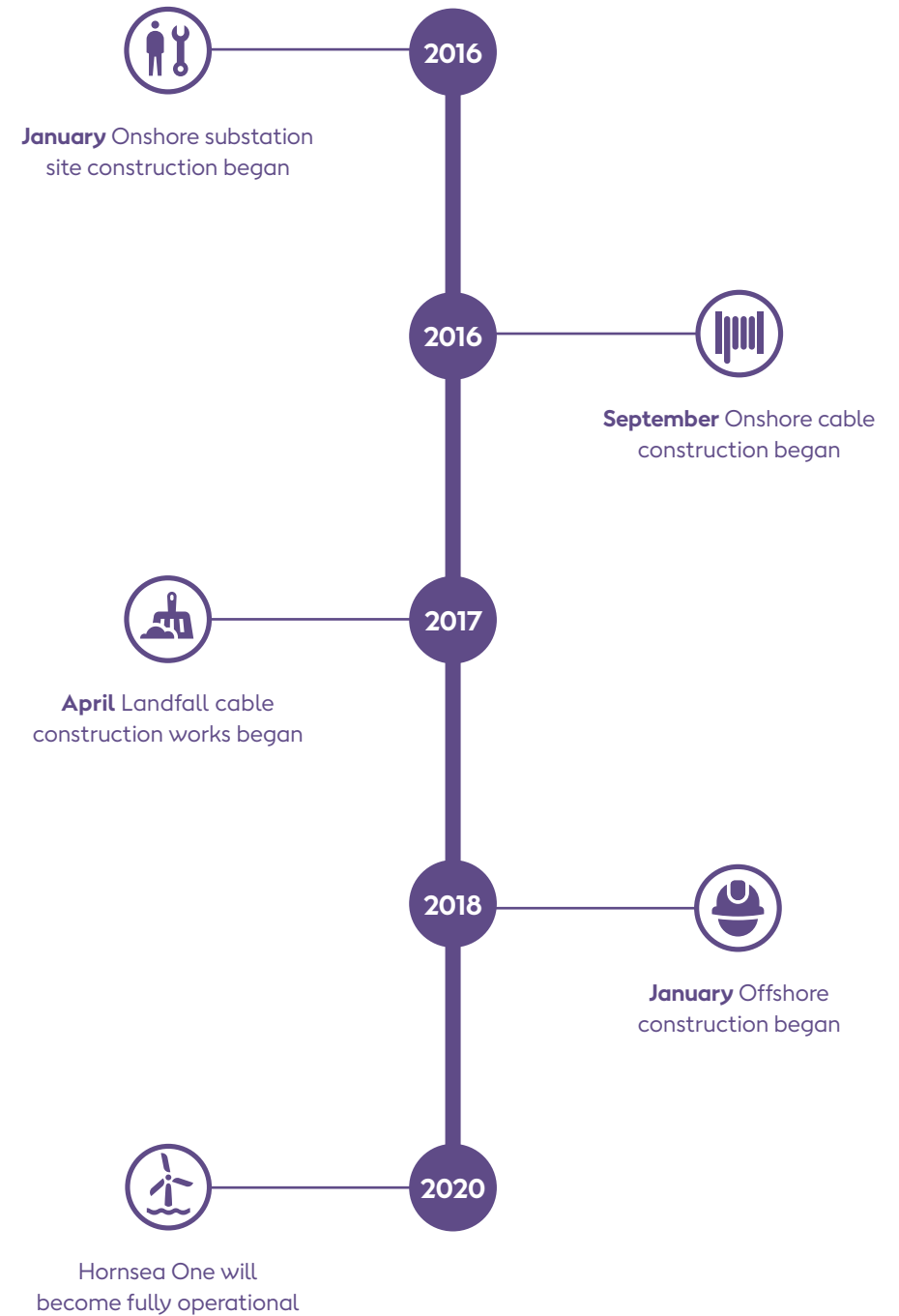
All onshore cables have been installed and reinstatement of the land is almost complete



All 174 foundations, monopiles and turbines have been installed offshore



Hornsea One timeline



A day in the life



Dave Taylor
Wind turbine technician

At Ørsted, we are on a journey to create a world that runs entirely on green energy. Every one of our employees plays a vital role in fulfilling this vision. We want to highlight some of the people carrying out key roles within our organisation, helping to ensure that we continue to revolutionise the way we provide power.

In this edition, we are looking at life offshore.

Please meet Dave Taylor who works as a wind turbine technician for Hornsea One. He lives on a Service Operation Vessel (SOV) 120 km offshore for two weeks at a time. To perform essential maintenance and construction offshore on Hornsea One, we use SOVs, which provide effective access to the offshore wind farm, ensure safe working conditions and safely accommodate and transfer crew even in the most challenging conditions.



Edda Mistral Service Operation Vessel

Dave explains:

“Living and working on an SOV is very different to working on wind farms situated closer to shore. We don’t get to go home at the end of a shift so we are still adapting to this way of working. Before any of us starts work, we have to complete our Helicopter Underwater Escape training course as safety is a priority for all of us.

It’s relatively unusual to encounter bad weather until October or November. In the event of adverse weather, the SOV is equipped with state-of-the-art computer controlled anti-roll and anti-heel systems which automatically compensate for any rough seas.

Working on turbines, we have to be mindful of lightning strikes. Thankfully turbines are equipped with safe zones for sheltering. They are also equipped with a 4G internet connection so we can entertain ourselves while we wait out a storm.

Each of us living on board receives a private cabin equipped with Wi-Fi and a TV. We also get a private bathroom. The food on board is very good with plenty of options at each mealtime. We have fish and chips on Fridays and even a roast dinner on Sundays!

Living in the workplace with up to 24 other technicians means it is important to have things in place so that we can switch off from work. We fill our free time with activities which help us to bond as a team: quiz nights, fitness-based competitions in our gym and table tennis which gets very competitive!

My job is very diverse and allows me to take on a variety of roles and responsibilities. Working so far offshore for an extended period of time can be tough but it really helps that everyone is motivated. We all enjoy working together and have embraced the challenges we have encountered so far.”



Crew members on board the SOV



Winch transfer by helicopter

Latest news

Hornsea One reached a significant milestone in November 2019 with the successful installation of all 174 turbines. Each turbine takes up to 12 hours of precision working to install. When commissioned, each turbine produces enough electricity to be able to individually power a UK home for over one day with a single rotation.

Each turbine is 190 metres tall, with each individual blade stretching 75 metres in length.

Offshore work on Hornsea One is expected to continue until 2020 when it will become fully operational. Hornsea One is almost double the size of Walney Extension which is currently the world's largest offshore wind farm.

Onshore, the substation at North Killingholme is now fully constructed and will begin to start collecting and transforming energy for it to be connected to the grid.



Turbine installation

Hornsea Two offshore wind farm



Hornsea Two has a capacity of 1.4 GW



It will provide enough power for well over 1.3 million homes



The wind farm will be located 89 km off the coast of Yorkshire



The onshore cable route will run in parallel to that of Hornsea One — between landfall at Horseshoe Point and the onshore substation in North Killingholme



Hornsea Two is due to be completed in 2022

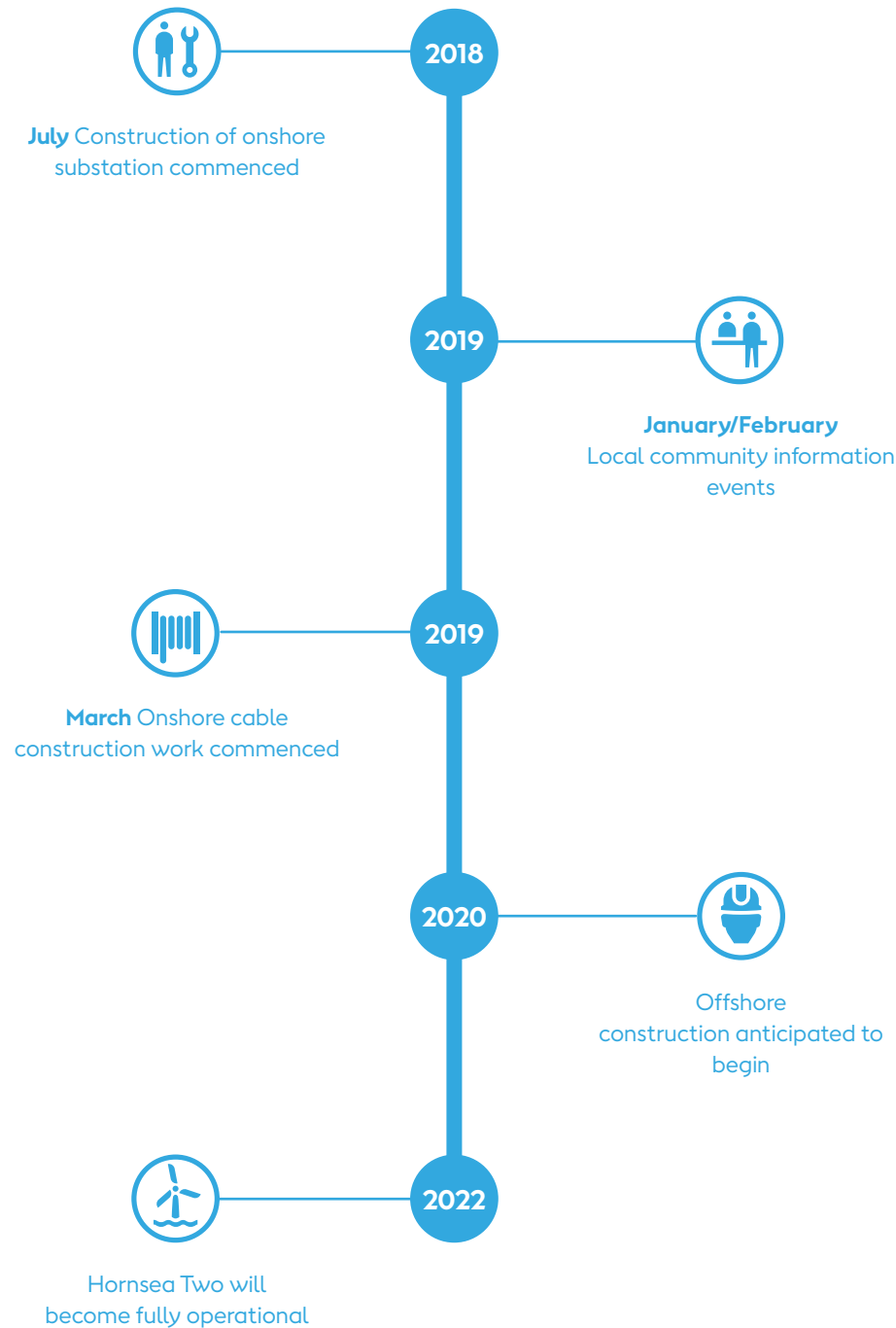


The onshore cables are being installed via ducts to speed up the cable laying process



Archaeological investigations along the cable route are ongoing

Hornsea Two timeline



Latest news

We are now well underway with construction works for Hornsea Two. On the southern half of the onshore cable route, 75% of the cable duct installation and 30% of the cable installation is complete.

We are delighted to have awarded a substantial contract to UK based company Tekmar which will utilise its manufacturing facility in the North East of England to produce and supply Cable Protection Systems for Hornsea Two.



Onshore cable laying



Hornsea Two is a game-changing renewable energy project in terms of both size and cost. The North East continues to play an important role in manufacturing components for our portfolio of world-leading offshore wind farms, with hundreds of Cable Protection Systems, Transition Pieces and kilometres of array cables coming from the region.

Patrick Harnett, EPC Director for Ørsted

Regional commitment

In July 2019, our state-of-the-art East Coast Hub hosted Northern Powerhouse Minister Jake Berry MP. We are committed to continuing to support key partnerships and initiatives in the region, including the Great Grimsby Partnership Board and the Grimsby Town Deal.



We're extremely proud to be a part of the local leadership working in support of the Grimsby Town Deal. Ørsted has made a long-term commitment to the area by building the world's largest operations and maintenance site right here in Grimsby. With over 80% of our workforce living within an hour's radius of the East Coast Hub, it's extremely important to us that we support projects which will benefit our employees and generations to come.

Darren Ramshaw, Head of East Coast Operations

Earlier in the year, the East Coast Hub and Ørsted were also pleased to host former Prime Minister Theresa May. Her visit helped to showcase the leading role Grimsby and the wider region are playing in the offshore wind industry.



Northern Powerhouse Minister, Jake Berry MP visits the East Coast Hub in Grimsby

Ørsted Great Grimsby 10k

In July 2019, we were proud to be headline sponsors of the fourth Great Grimsby 10k.

Starting at Grimsby Town Hall and following a route to the finish line in People's Park, this year's event broke records. Over 3,044 runners took part, making this year's event the biggest to date.

The Ørsted team hosted a family friendly adventure trail in People's Park. This activity was well received by children and parents alike.



The public support was fantastic on the day. Everyone cheered as we passed, and it felt like the whole of Grimsby was out to support us. There was a real feeling of team camaraderie as well, and my colleagues were so keen to support each other before, during and after the race.

Aaron McNish, Ørsted Technical Site Supervisor

Upon completion of the trail, children were awarded a free book produced by Ørsted which aims to open up age appropriate conversations about climate change.

Ørsted has already committed to sponsor next year's race and would like to thank all those who played a part in helping ensure the success of the event.



Ørsted team runner and son in People's Park

East Coast Community Fund



The East Coast Community Fund is part of Ørsted's community engagement programme for our Race Bank and Hornsea offshore wind farms which are located off the Yorkshire, Lincolnshire and North Norfolk coast.

We have committed to a Community Fund worth £465,000 each year for the next 20 years. There are two funding rounds each year. To be eligible to apply for a grant your project must be both located and for the benefit of communities within the funding area. Grants from £1,000 up to £50,000 are available.

The Fund was launched in December 2016 and to date well over £900,000 has been donated to more than 80 deserving projects. In total, over the 20-year lifespan of the Fund, up to £9.3 million will be made available for community and environmental projects in the coastal areas of Yorkshire, Lincolnshire and North Norfolk.

The most recent round of funding closed on Wednesday 14 August 2019. Applications for the next round of funding will open in December 2019 and close on Wednesday 5 February 2020.

For more information on the Fund and to check eligibility criteria, visit: www.grantscape.org.uk/fund/eastcoastcommunityfund

You can contact GrantScape on **01908 247634** or via email at: eccf@grantscape.org.uk.

Community engagement methods

We have a range of engagement initiatives which allow you to follow the progress of the projects or to contact us with your questions. These include:



Local engagement

The project team meets with several parish councils to share plans and engage with the local community.



Website

orsted.co.uk



Twitter

[@OrstedUK](https://twitter.com/OrstedUK)



Freephone information line

0800 111 4478

The Freephone information line is open for calls between 9am and 5pm, Monday to Friday, with an answer phone facility to take messages outside these hours.



Community liaison officer

We have a dedicated community liaison officer, Dereth Morgan, who covers both projects in an onshore capacity. Dereth is the first point of contact for onshore enquiries from the local community.

You can contact Dereth by calling **07472 617 839** or by emailing community@hornsea1and2.co.uk

Ørsted
5 Howick Place
London
SW1P 1WG

© Ørsted 2019. All rights reserved. No parts of this publication may be reproduced by any means without prior written permission from Ørsted.

All graphics in this document are for illustrative purposes. Dates are based on available information and are subject to change.



orsted.co.uk

Ørsted