

Ørsted  
Community  
Newsletter

April  
2021



Hornsea  
One and Two  
Offshore  
Wind Farms

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

I am delighted to announce that work on Hornsea Two continues to progress on schedule as we move through 2021, following what has been a challenging but successful year. At the end of 2020 we reached an important milestone on the project as the installation of all onshore cables into the ground was finalised. Remaining construction works such as land reinstatement will continue to take place throughout 2021.

We also reached an important milestone in 2020 as we installed the foundations for our offshore substation using the world's largest subsea crane vessel. Other offshore construction works, including wind turbine foundation installation, will continue to take place throughout the year.

At Ørsted, we are also delighted to announce the renewal of our partnership with education charity Teach First, which is helping to build a fair education for young people on the North East and North West coasts.



**Patrick Harnett**  
Senior Programme Director, Hornsea Two

## About Ørsted

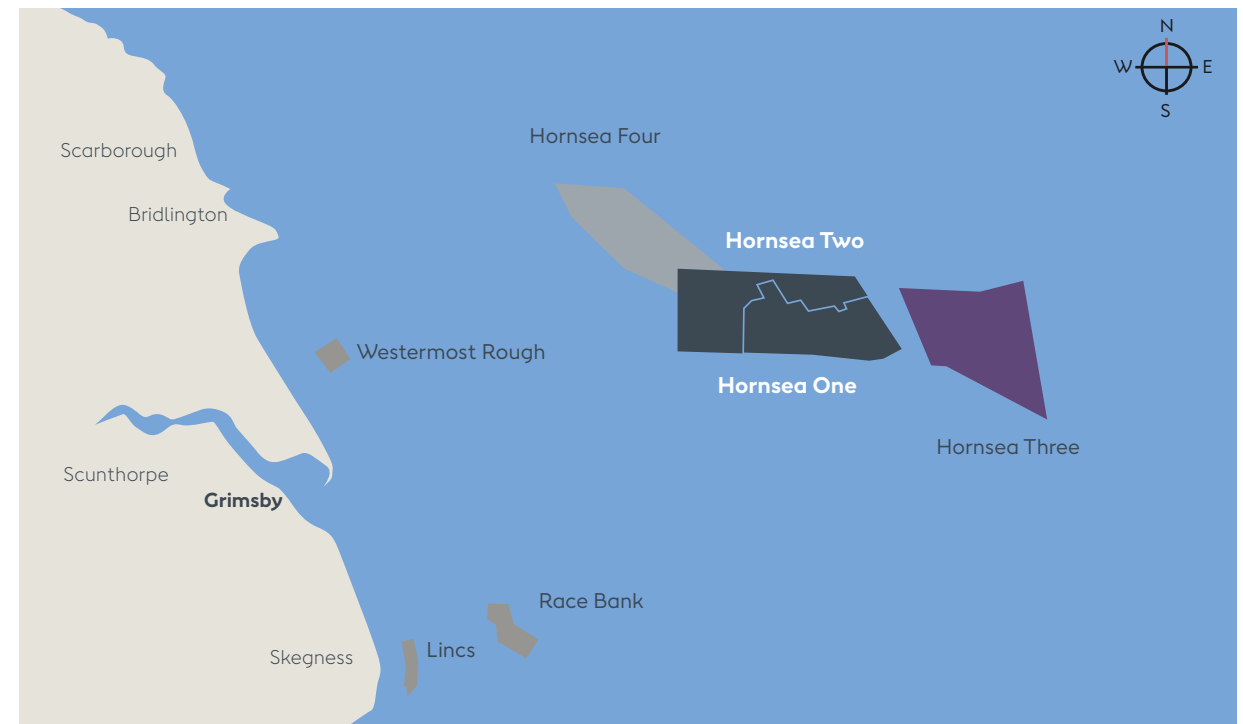
We are a renewable energy company with **the vision to create a world that runs entirely on green energy**. Climate change is one of the biggest challenges for life on earth; we need to transform the way we power the world.

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 CO<sub>2</sub> emissions and focussing 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 now commercially operational.

development consent from the UK Government. To find out more, please visit: [hornseaproject3.co.uk](http://hornseaproject3.co.uk)

Hornsea Two is adjacent to Hornsea One and will be situated 89 km from the coast.

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

Hornsea Three could generate enough green electricity to power well over 2 million UK homes and will connect into the national grid in Norfolk. The project has recently been granted

# Hornsea Two offshore wind farm



Hornsea Two has a capacity of 1.4 GW



It will provide enough power on average for more than 1.3 million homes



The wind farm is located 89 km off the coast of Yorkshire



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



Hornsea Two is due to become commercially operational by 2022

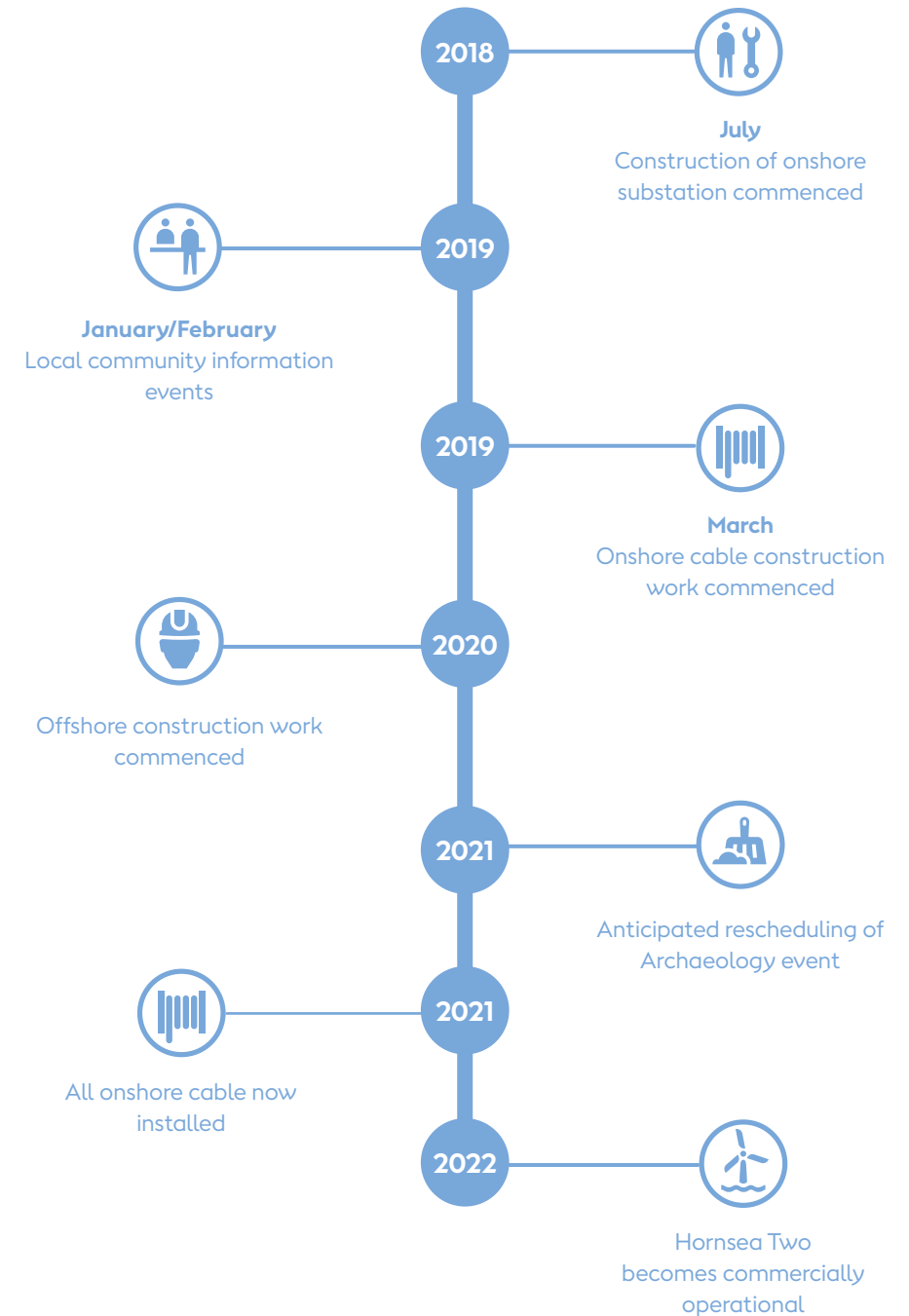


Onshore cables have now been installed



Archaeological investigations along the cable route have now been completed

# Hornsea Two timeline



## Latest news - Offshore

Offshore works are continuing to progress on the project following the installation of the offshore substation foundations, with Hornsea Two on schedule to be commercially operational in 2022. Wind turbine foundations will continue to be installed throughout the year.

Offshore construction works commenced in October last year with wind turbine foundation installation works, with the use of DEME Innovation and Pacific (Wind) Orca vessels. In total, 165 monopiles and transition pieces will be installed at sea in preparation for the site's 8.4 MW turbines. The turbines will also feature new 81-metre-long blades which are currently being manufactured locally at the Siemens Gamesa Renewable Energy blade factory in Hull.

Another milestone reached in offshore construction was the installation of the first export cable, which when operational will carry the clean energy produced by Hornsea Two ashore and connect to the onshore cable route. The two remaining export cables will be installed later this year. Seabed preparation for inter-array cabling also took place last year, in preparation for cable installation to commence this Spring.



## Latest news - Onshore

We are delighted to announce that all onshore cable installation has now been completed and that reinstatement works have now resumed and will be completed later this year.

Outside of onshore cable installation and land reinstatement, testing has also been taking place at the onshore substation in North Killingholme where all high voltage equipment and underground cables connecting the substation to the national grid is now installed.

We also undertook our first phase of testing of the cable connections between the substation and the national grid in February and March 2021, and the results were a success.

At Ørsted, we would like to thank those involved in the cable testing process for their planning, coordination and hard work in progressing this part of the project. LS Cables and testing contractors Kinectrics have collaborated effectively in what has been a successful testing campaign. This is also a testament to the hard work and diligence of the jointing and testing, duct and cable installation teams for their work on both the onshore substation and cable route.

# A Day in the life

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.

In this edition, we are taking a closer look at the work that is involved in the installation of offshore foundations for our wind turbines and cables on Hornsea Two.

On our projects, the commencement of installing offshore foundations is an extremely important milestone and as the work progresses, it gives us a first look at how our wind farm is taking shape.

Please meet Thomas Rosier, one of our Offshore Installation Managers who is currently working out at sea on Hornsea Two. Following some inspiring university placements in 2012 whilst training to be a civil engineer, Thomas began working with Ørsted on offshore wind farms. He is currently working on the jack-up crane vessel with other colleagues, including Health, Safety and Environment advisors, to oversee the heavy lifting and installation works that are ongoing. Thomas and colleagues review and approve the procedures, looking out for improvements or possible hazards of the installations.



**Thomas Rosier**  
Offshore Installation Manager

## Thomas explains:

As an Offshore Installation Manager, we work in collaboration with the design and fabrication teams, and our contractors. We select and coordinate an Offshore Installation Contractor to deliver the foundations out in the offshore site, ready for the cables and turbines. In a practical sense, that means guiding and reviewing design decisions for optimal and safe installation offshore. When the time comes for the works to begin, we ensure that everything is in place for when the vessels arrive.

The key to resolving day-to-day challenges is clear and consistent communication across an internationally diverse workforce. In order to successfully construct the wind farm and ensure the whole system runs smoothly, this requires alignment of a diverse range of interests and expertise, along with ensuring all team members plan and coordinate their tasks together.

A primary challenge we face in constructing the world's largest offshore wind farm is maintaining perseverance. Each foundation and turbine involves many hundreds or thousands of tonnes of steel and equipment, requiring complex and sophisticated engineering and close attention to detail. Working on Hornsea Two requires sustained focus for over a year to help complete construction for the offshore site. We have kept ourselves fresh, motivated and alert over this period and remain well on schedule for the project to become commercially operational in 2022.

As with many major infrastructure projects, we have faced further challenges from the COVID-19 pandemic, including the availability and readiness of materials and equipment. The pandemic has also reduced the ability of our colleagues and contractors to travel. Over the past year, our approach to teamwork and collaboration has been redefined and is now entirely virtual, with video and written communication more important than ever. We have also used the services of the helicopters from Humberside airport to provide a more regular and convenient service to the worksite.



Jack-up crane vessel in use as monopile foundations are installed.

# Hornsea Two Wind Turbine

**8 MW** Our turbines have an output of 8 MW

**165** turbines will fill the array

167 m

200 m

Hornsea Two will provide enough power on average for

**1.3 million homes**

One turbine provides enough energy for **160,000** hour-long zoom calls

40 m height



# Ørsted goes virtual for Hornsea Two planning event

In February, Ørsted held a major construction rehearsal for Hornsea Two at a high-tech immersive training centre to plan for the later stages of the project's installation. Using the Thrive Safety Leadership Centre at the maritime training facility Modal in Immingham, it was originally envisaged that around 100 people would meet to further discuss offshore construction of what will be the world's largest offshore wind farm.

However, due to COVID-19, the project team wanted to avoid the need for any unnecessary travel, therefore it was decided that this event would be held virtually using the technology available at the Thrive Safety Leadership Centre. The event was carried out with only eight people on site wearing the latest PPE technologies, as teams joined remotely from across the UK, Europe and Singapore. The teams revealed that

this modern and safe methods of coordinating drills is even better than what came before.

// We've had to adapt the way we work and implement new techniques to give our teams the best possible experience whilst connecting to our virtual event.

**Jason Ledden**  
Senior Project Manager at Ørsted



Thrive Safety Leadership Centre in Immingham



Monopile foundation with installed gangway for construction staff

# East Coast Community Fund

Since the East Coast Community Fund (ECCF) was established in 2016, we are proud to announce that as of March 2021, over £1.85 million has been awarded to over 140 groups in the local community. This funding has helped support various organisations, including food banks, charities, community centres and more.

Ørsted have committed to annual ECCF grants worth £465,000 and our previous funding round closed on 03 February and applications submitted before this date are currently being considered. We encourage applications from all groups who are interested in receiving funding to apply, with the next round of applications closing on 28 July 2021.

The following temporary criteria changes which were introduced last year will continue to be applied for this round of funding:

- No match funding will be required for all applications at this time.
- Re-application restrictions have been lifted. Any groups that have previously received a grant, have a live project or have been unsuccessful in the last round may re-apply.

Our last round of successful funding applications was announced in January 2021, with 12 applicants receiving funding which totalled almost £200,000.

All of Ørsted's Community Benefit Funds, including the ECCF, are administered by independent grant-making charity, GrantScape. The decision-making process is supported by a local Advisory Group (AG).

For more information, please visit: [orsted.co.uk/communitybenefitfunds](https://orsted.co.uk/communitybenefitfunds)

Contact GrantScape on 01908 247634 or via email at [eccf@grantscape.org.uk](mailto:eccf@grantscape.org.uk)

// Over the last 12 months we have recognised the challenges faced by many communities across the UK and have made the above criteria changes to allow easier access to our grants for those in need. We are pleased to see over £500,000 awarded to 32 groups across our three Funds for projects relating directly to the impact of COVID-19.

**Imran Nawaz**  
Stakeholder Advisor and Community Benefit Fund Manager for Ørsted

# 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](https://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 CLO, 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](mailto:community@hornsea1and2.co.uk)



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