VATTENFALL —

Norfolk Offshore Wind Zone

Newsletter | December 2022



Hello.

We hope this newsletter finds you well. It hasn't been long since our last update but we've been saving some great stories about our work in Norfolk for this festive newsletter, 'wrapping up' a busy year for the Norfolk Offshore Wind Zone team.

Thanks to the rapid pace of innovation in offshore wind and Vattenfall's role at its leading edge, we will be able to produce more power from the Norfolk Offshore Wind Zone. Crucially, this will take place with no extra impact on local residents.

In this edition, we recap on Community Benefit Fund activities, and look ahead to the next phase in 2023. We'll introduce you to some team members, who contribute to the project in ways that you may not have imagined. We hope their stories inspire those considering careers in our exciting industry.

Most importantly, we hope you and your families stay safe and well over the winter and that you have a great festive break. We look forward to continuing our engagement with you in the new year.

On behalf of the Vattenfall team, I'd like to wish you all a very Merry Christmas.

Denise Hone

Stakeholder Engagement Manager Norfolk Offshore Wind Zone



Outstanding Community Liaison Officer, Will Sealey, wins award

Will was named 'Young Person of the Year' at the East of England Energy Group awards last week, a fitting end to his first year working on the Norfolk Zone. Up against excellent competition, we're proud that peers commend his work and enthusiasm.

Since starting at Vattenfall in February 2022, Will has mentored sixth formers and presented to hundreds of young people, quickly becoming the goto for STEAM (Science, Technology, Engineering, Arts and Mathematics) outreach - a key priority for Vattenfall and the Government.



He's also central to Vattenfall's programme to co-develop its £15m Community Benefit Fund with local people, particularly involving the innovative, future-facing ideas of younger people.

"It has been a fantastic year for me and has been a huge opportunity for personal growth in confidence: presenting at large events like SNS and Wind Week, travelling around Europe meeting members of the wider Vattenfall Stakeholder Engagement and Offshore Development team in Denmark, France and Germany".

Norfolk Zone Highlights



Norfolk Zone fully consented & CfD win for Norfolk Boreas

Despite some challenging planning-related obstacles to overcome, 2022 saw completion of all consenting and DCO requirements for Norfolk Vanguard and Norfolk Boreas Offshore Wind Farms. Norfolk Offshore Wind Zone is now fully consented and we move ahead with construction from 2023 onwards.

Supply chain engagement is progressing well, and we have a number of key contracts signed, and preferred bidders identified.

Norfolk Offshore Wind Zone



4.6 million

homes to get clean, green electricity from Norfolk Offshore Wind Zone We are very pleased to share the news that capacity for the Norfolk Offshore Wind Zone will be increased from 3.6GW to over 4.2GW, meaning that our project will now produce electricity for the equivalent of at least 4.6 million homes - an increase of 700,000 homes.

The increased capacity will result in no additional impacts for local residents, and can be delivered within existing plans.



Norfolk Zone wins **Best Project**at the prestigious NIPA Awards

The Norfolk Offshore Wind Zone team has won the National Infrastructure Planning Association's (NIPA) Best Project award. Judges commended Vattenfall for work with local communities, praised their efforts in learning from early difficulties, along with the efforts taken to tackle really big

challenges in offshore wind, particularly around protecting the environment. Head of Consenting Kathy Wood said: ""This is a fantastic achievement and a reflection of all the hard work that the team have put in to deliver the Norfolk Offshore Wind Zone. So many people have contributed to its success so far so I'm delighted for everyone involved to be recognised for their efforts to deliver such an important clean energy project."

Norfolk Zone GIS mapping tool shortlisted for EEEGR Award

Building innovative tools to support climate smart offshore wind development



In addition to Will's success (see p1) the East of England Energy Group's annual awards showcased Vattenfall innovation. Our in-house GIS team has developed a webGIS application to aid effective collaboration among the team delivering Norfolk Offshore Wind Zone projects. It consist of online 2D and 3D applications and a mobile app for use out in the field, using ESRI software, and allows users to capture data and upload to an interactive map.

A public-facing element of the tool will also aid local residents and stakeholders to track the project's progress. Throughout the consenting period, we made use of an interactive map showing our planned onshore cable route, the onshore infrastructure as well as the offshore

sites of Norfolk Vanguard and Norfolk Boreas. It has been regularly updated to show the evolution of our proposal, and now, consented plan.

Construction of the onshore elements of the project are due to begin in autumn 2023, and the interactive map will be upgraded to provide more detail to local people. It will show what has happened/will be happening in the region in terms of onshore construction, as well as community outreach events. This will be a truly invaluable tool for all stakeholders: from companies in our supply chain, to the communities that are living close to ongoing works, building understanding and we hope, further strengthening our relationships along the cable route.

Out & About

Community engagement is important to us. At all stages of our projects. It allows us to work with you throughout their development, construction and operation. It also provides opportunities to keep you updated on the Norfolk Zone projects and our sector. Read on to find out what our team members have been up to.

Celebrating food, fun and farming at The Aylsham Show

On the late summer Bank Holiday Monday in August, we joined over 15,000 locals and visitors to attend and exhibit at the Aylsham Agricultural Show. Visitors to our stall enjoyed a range of activities such as the 'offshore wind technician experience' on the virtual reality headset or colouring in. As part of the children's discovery trail, we engaged with many families throughout the day; discussing our project, sharing details about the Norfolk Zone Community Benefit Fund and chatting about climate smarter living. We also won runners-up for the best trade stand of the show!



You might also have seen us at....



The Royal Norfolk Show



STEM Day at East Coast College



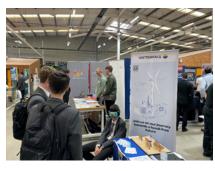
Bishop's House Garden Open Day



UEA Engineering Summer School



Mission Renewable



UTCN Careers Day

Inspiring Norfolk's future workforce with 3D VR Wind Farm Design

After several years of success with the first version of our 3D VR Wind Farm Design programme, and then a pause during lockdown, we are pleased to be back out on the road with our programme delivery partner 3DW to relaunch this popular module at two East Anglia colleges: UTCN & East Coast College.

The programme uses 3D model software and VR technology to give year 12 & 13 pupils an immersive experience of life on a wind development project team. Individual pupils take on different project management roles within small 'project team' groups, and through problem-solving and bitesize presentation sessions, they learn about the basics of wind farm development, environmental and technical constraints and building a business case. The team members will then use this knowledge to design their very own wind farm and present their project proposal to their peers.

The other unique element of the programme is that it is designed to be delivered by the students themselves; harnessing the strong engagement and skills development potential of peer-to-peer learning. Students at UTCN in Norwich and East Coast College in Lowestoft have now completed their programme delivery training and will be ready to deliver the module within their own colleges and, from early 2023, for visiting students from other colleges too.

If you represent a school/college (or a hobby/interest group) and you'd like to hear more about the programme, please get in touch with our Community Liaison Officer Will Sealey to find out more. william.sealey@vattenfall.com







The people behind the project

From the British Army to a career in offshore wind: we introduce the Norfolk Zone's O&M package manager, Richard Beck.

Norfolk-born Richard Beck spent seven years in the British Army as a Royal Engineer before transitioning into a career within the offshore wind sector. Growing up in Happisburgh, Richard has worked in renewables for the past ten years and now works for Vattenfall as the operations and maintenance package manager for Norfolk Offshore Wind Zone.

Richard said: "Even after just seven years, leaving the military was a lot to get my head around, such as deciding what to do, applying for jobs and how to reestablish my career.

"The resettlement package, guidance and training opportunities provided were very good and I took every opportunity to attend courses, gain certificates and glean advice. Nevertheless, starting with a blank sheet of paper was scary.

"Nowadays, the Armed Forces Covenant, which Vattenfall have recently progressed to Silver Award, demonstrates that companies are very willing to help bridge this gap."

Offshore wind: a career for life

Transitioning from the Army to offshore wind has provided Richard with a 'career for life' and now the 43-year-old wants to raise the prominence of the industry and the opportunities available for ex-military personnel.

He continued: "There's a lot of common ground between the military and the offshore wind industry. I think the fairly obvious transferable skills are technical, such as engineering, hydraulic electrical engineering and mechanical engineering. There are so many opportunities for young people and especially anyone ex-military. Whether that's in the construction phase, design stage, or longer-term operations and maintenance - these projects have a lifetime of over 30 years.

"We have seen a lot of success at Grimsby, and I think Great Yarmouth and Lowestoft in particular and the surrounding large catchment areas have got an incredible opportunity here.

"There are going to be a lot of jobs for the longer term, not just on this project but others as well, and in addition to that there are tier one and tier two suppliers and everything that is associated to it with the supply chain. next step in their career."

He concluded: "Transitioning into offshore wind from the military has offered me a career for life. I feel lucky to live in a region that's at the core of the UK's offshore wind development.

"Not only are the opportunities extensive locally but also globally as an industry. I would recommend the offshore wind sector to any ex-military personnel looking for that next step in their career."



Find out more about the Armed Forces Covenant and Vattenfall's commitment to supporting the armed forces community by tapping the buttons below:

Wind Energy Supply Chain & Skills (Vattenfall website)

Armed Forces
Covenant website



Richard is now supporting one of our new Year in Industry students, Kassy Toto.

Kassy is currently studying Accounting & Management at UEA and will be working with the Norfolk Zone team for a period of one year as part of a programme to give students a combined academic and real industry learning experience.

For the next piece in our wind careers series, we had a chat with Lisa Holland, one of the GIS Analysts at Vattenfall.

(GIS: Geographic Information Systems)

Lisa is based at our office in Hexham and works across a range of projects including onshore wind, offshore wind and solar, but the majority of her time is currently spent working on the Norfolk Offshore Wind Zone.

Can you tell us a bit about your background? How did you end up in your role?

I always had a real passion for geography and maths when I was at school, and for me, they were the obvious choice to do at A-level. I didn't have a fixed idea of how my interest in those subjects could be combined or how they would translate into further education, but then I discovered that Newcastle University offer a Geographic Information Science degree - it was the perfect solution for me. I studied there for 3 years and learned to work with ESRI ArcGIS, the industry-standard software that I still use now in my day to day work at Vattenfall.

After university I worked in a GIS role at an offshore survey company, working across different types of projects, including renewables. I quickly came to realise that wind energy was the future, and knew I wanted to pursue a career in this industry. Now I'm at Vattenfall doing exactly that and working in wind every day. I'm proud to be working on projects that will make a huge difference, like the Norfolk Zone.

Can you tell us a bit more about what your role involves on a day-to-day basis?

It's really varied and depends what project I'm working on. Sometimes I'll be working on constraints mapping; setting out technical and environmental constraints within a map environment to identify new project sites and optimum locations for wind turbines, for example. On well-established projects like the Norfolk Zone, I work with a wide range of different people in different teams, such as those in geoscience, consenting / planning, systems & wind farm design and often also those in non-technical roles such as the stakeholder engagement or supply chain teams. There's a lot of collaboration.

Can you tell us what you've been working on recently for the Norfolk Offshore Wind Zone?

Part of my role is to maintain and continuously develop the webGIS tool that we share with our colleagues outside the GIS team. It's a more user-friendly web-based tool that helps them to visualise and contextualise the work they do - a really important aid when you're working on projects of massive scale like the Norfolk Zone. In recent months we've been developing a new webGIS application to aid effective collaboration among the huge number of people working on the Norfolk Offshore Wind Zone projects. It consists of

online 2D and 3D applications and a mobile app for use out in the field. This allows the team to capture data whilst out and about and be quickly uploaded and visualised, and integrated as location-specific documentation onto the map. The tool will be used by Vattenfall team members and contractors, to ensure that accurate data is captured and available for use in near real-time. On a fast paced, complex project, this is real progress and it's a really exciting tool to work on. We're actively encouraged to be innovative and that's one of the best things about the job.

(Note: this tool was nominated for an award. See pages 2 & 3 to read more)

What other insight and advice would you give someone who wants to work in a GIS role in the wind industry?

Across our industry, people come from a variety of different backgrounds, and not all came from a university environment. There are different ways to develop the technical skills we need and different pathways to careers in GIS.

It's a great time to get involved in this industry. There's so much happening and the scale of the newer projects is so huge that you're almost guaranteed to be given the opportunity to work with a range of different experts on a range of different areas of work. The industry moves fast, as does the technology, so it's important to have a real passion for learning, keeping your knowledge fresh and staying on top of new developments. It helps if you love maps too, of course!





Screenshot of the Norfolk Zone interactive map Click the image to open the map in a new window

Community Benefits

The Norfolk Zone offshore wind farms will bring £15 million of funding to local communities, and will be in place for the 25 year life of the wind farms. This is the largest funding commitment to Norfolk by an offshore wind company to date.

Community and stakeholder dialogue began in 2021 and phases 1 and 2 have now been completed. We expect to begin the third phase of dialogue early in 2023. To find out more about the progress to date please read on.



Update on progress

We're just over 18 months into the Community Benefit Fund dialogue programme and thanks to the open, positive and active engagement from many people in the communities located near our onshore infrastructure route, we are making great progress.

So firstly, and most importantly, a great big 'thank you' to everybody that has participated so far: those who have attended our workshops - either in person or online - and those who have contributed feedback, either via the survey or by emailing us directly. We want to build a community benefit fund that meets the needs and interests of your communities, so your input is vital.

The phase 2 workshops concluded in autumn 2022 and we have been collating the information and input gathered during those workshops. We will use the feedback that you provided to inform the next stage of the process, the thematic workshops, and we will kick off phase 3 early in the new year. If you haven't participated yet, don't worry, there will be a chance to get involved in this next round of discussions and we'll send dates for the workshops in an e-news update as soon as we can.

Coming in early 2023: Phase 2 Report and dates for Phase 3 workshops



To see current slide packs and reports please visit the website.



Stay Connected

Throughout the development and planning process we have enjoyed productive and positive engagement with the communities located close to the cable route, and we would very much like to stay connected as we enter a new construction-focused phase next year.

Onshore preparation works for the Norfolk Zone wind farms, such as A47 road access improvements, are scheduled to start early in 2023 and construction activity will increase in the autumn when we commence ducting and installation works at points along the cable route.

What can you expect from us in this next phase?



We will inform

Our locally-based Community Liaison Team (CLT) will aim to keep people updated on any issues and activities going on in the local area. This will include:

construction activity notices drop-in sessions website updates newsletters



We will respond

The Community Liaison Team will listen to local communities and stakeholders and seek to address questions and concerns. They will be contactable & responsive via:

telephone (incl out of hours) freepost email



We will involve

We will involve local residents, skills and education providers businesses & other stakeholders in opportunities to benefit and learn as we build the project. For example:

Community Benefit Fund education programmes promote job opportunities

From early next year, we'll begin sharing our engagement plans and details for all of the items listed above. In the meantime, you can stay in touch with us via the project email address norfolk@vattenfall.com or book a chat with us via the online meeting tool. Whether it's questions about the project, general info about wind energy or supply chain queries, we're always happy to chat.

Thank you!

Our recent campaign to boost the e-newsletter subscriber list was a great success and we added almost 400 new readers.

As promised, we have donated £200 to both Norfolk Community Foundation's Hot Spot campaign and the Norwich Open Christmas initiative.

Please keep sharing the link with your friends, neighbours and anybody else who might be interested in receiving updates.

Click to register for e-news updates

Link for sharing: https://bit.ly/NorfolkEnews

Supplier list- click to register your interest

Link for sharing: https://bit.ly/NorfolkSuppliers

Book an online chat with our project team

Link for sharing: https://bit.ly/NorfolkKIT

The Climate Challenge







What's your climate smart idea or invention?

At Vattenfall, our purpose is to enable fossil-free living within one generation but we know we can't do it alone. The best ideas happen when we all work together. By **climate smart** we mean the **positive** things we do either by ourselves or as part of a group, to keep our planet and environment **happy** and **healthy.**

This can mean lots of different things: recycling, keeping plastic out of the sea, picking up litter, growing more trees. We love climate smart inventions and ideas.

How could your home, school, village or town become more climate smart?

If you're under 18 years of age and you have climate smart ideas to share, we'd love to see them. Drawings, photographs, presentations, videos - we don't mind how you do it.

Please check you have permission from your parent or guardian, and ask them to send your amazing ideas to us at: norfolk@vattenfall.com

We'll get back to you with a **Climate Smart Challenge** certificate. We hope to hear from you soon!



The Norfolk
Offshore Wind
Zone Team

