



Wind Farm Place – the Sheringham Shoal O&M base

Keeping the turbines turning for power success

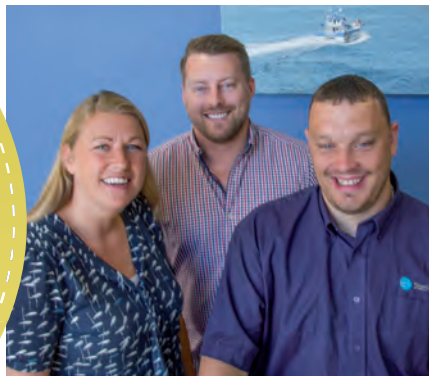
Sheringham Shoal has 88 turbines with a total installed capacity of 317MW. The first operational turbine sent electricity to the National Grid in 2011, and by the end of 2012 all of the turbines were installed and fully commissioned. The Operations and Maintenance (O&M) phase commenced in January 2013.

As operator of the wind farm, Statkraft must maximise generation availability and output, whilst minimising production costs. With these goals in mind, a specialist team has been established to take responsibility for all aspects of operational planning.

O&M Planning Co-ordinator Rebecca Callister is enthusiastic about the role of this small, highly focused Planning and Execution Team saying: *"By bringing all resource planning into one place we are able to maintain a one to three month operational 'look ahead'; we can then take the necessary actions in a suitable timescale to support detailed 24/7 control of all the operational processes and procedures that make up our operational model. We are now a three strong team and our role covers both the offshore and onshore turbines and sub-stations, and involves us looking at service schedules, stopped turbines, recurring faults, vessel availability and signing work permits."*

She added: *"As proof of the concept, during the team's first five months, we have helped the business to achieve greater turbine availability, reaching 96% in 2014, increasing electricity output to a total of 1088GWh in that same year whilst lowering production costs. Now that we have proven processes and systems in place, in the last six months we have improved this further to 98%."*

Come to the Sheringham Shoal Community Marquee at Greenbuild 2015 Saturday 5th & 6th September at Felbrigg Park, near Cromer.



The Planning and Execution Team

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New sign at Wind Farm Place

Recent changes at Wind Farm Place

Marine and Logistics Manager Tom James, who had been on secondment to the Sheringham Shoal Offshore Wind Farm from Statoil, has now returned to Norway.

He has been replaced by Russell Hill, who had previously been Statkraft's HSE Site Representative responsible for ensuring safe systems of work were carried out by Sheringham Shoal's staff and subcontractors at all onshore and offshore locations.

Gavin Graham is the new Site Representative, working alongside Karl Butler.

Hopefully, regular visitors to Wind Farm Place will have noticed that the imposing sign at the entrance to the site has recently been changed to reflect the new corporate Sheringham Shoal branding that has been introduced since the UK's Green Investment Bank became one of the owners of the business.

Exercise Sheringham Response

Health and Safety is of paramount importance in all offshore environments, and in early September 2015 the Sheringham Shoal Offshore Wind Farm's emergency response procedures in handling a major offshore incident will be tested through a rigorous practice – Exercise Sheringham Response.

Exercise Sheringham Response will involve the use of a helicopter and an RNLI lifeboat to evacuate 'injured' personnel from one or more wind turbines in the wind farm field, and it will also practice and prove all the co-ordination and communication links required to manage such an incident.

The local communities in North Norfolk will be given advance notice of Exercise Sheringham Response in order to avoid the risk of creating unnecessary anxiety and concern that often accompanies activities involving rescue helicopters and lifeboats.



Technicians transfer into the wind farm field from the Outer Harbour at Wells-next-the-Sea

New offshore neighbours for Sheringham Shoal

The next two or three years will see two major offshore wind projects taking place which will result in the Sheringham Shoal Offshore Wind Farm gaining new neighbours in the Greater Wash.

Dong Energy has announced that it will build the Race Bank Offshore Wind Farm 16.8 miles off North Norfolk's Blakeney Point; it will have a generation capacity of 580 MW from its 91 wind turbine generators.

In 2016 Dudgeon Offshore Wind Limited, which is owned by Statkraft, Statoil and Masdar, will start work 20 miles off the coast of Cromer in North Norfolk constructing the Dudgeon Offshore Wind Farm. This will have a generation capacity of 402 MW from 67 wind turbine generators. The onshore cable and substation construction works have already started, and the Dudgeon Operations and Maintenance base will be located in the port town of Great Yarmouth in Norfolk.

Construction project progresses well at Salle substation

In order to comply with the requirements of the National Grid, two harmonic filters are now being installed at the Sheringham Shoal's onshore electricity substation at Salle in Norfolk.

This is a major construction project and, as this picture gallery shows, it is currently progressing very well.



April 2015



May 2015



July 2015



August 2015

Images by courtesy of Graham Newman

Local Initiatives...

Sponsoring the North Norfolk Triathlon

The North Norfolk Triathlon is organised by the Wells Harbour Maritime Trust, and this year the Sheringham Shoal Offshore Wind Farm is one of the event sponsors.

The event is to take place on 20th September 2015; starting on the harbour quayside it will take in a 1.5 km swim in open water, a 40 km bike ride and a 10 km coastal run before finishing where it started – on the quayside. Now in its 8th year, the event attracts athletes from all over the UK and raises money for the work of the Wells Harbour Maritime Trust.

The money raised is used to support a range of maritime activities for young people, aiming to give them a taste of the challenges and excitement of sailing, seamanship

and associated water sports, including training and education.

Bjørn Mo Østgren, General Manager of the Sheringham Shoal Offshore Wind Farm salutes the aims of the Trust, saying:

"Wells-next-the-Sea has been home to the Sheringham Shoal since the planning stages, and now is our dedicated O&M base. We are pleased to play our part in the community by supporting a number of the town's activities, one of which is the forthcoming North Norfolk Triathlon."



The North Norfolk Triathlon will start and finish on Wells-next-the-Sea quayside.

Additional education programmes coming to The Mo

The Sheringham Museum at The Mo on Lifeboat Plain has been awarded nearly £1.1 million by the Heritage Lottery Fund for its Atlantic 75 Seaside Education and Archive Centre project.

The money will pay for a roof extension above the Sheringham Shoal Visitor Centre in The Mo which, as well as housing Sheringham's RNLI Atlantic 75 lifeboat, will include a new education room with space for more than 100 people and exhibits.

After congratulating the Sheringham Museum team on the award of its HLF funding, Sheringham Shoal General Manager Bjørn Mo Østgren said: *"The Sheringham Shoal Visitor Centre at The Mo already attracts a growing number of school and student visits each year, and I am sure the Museum's new education room will help encourage further growth in such visitor numbers. We look forward to continuing to work closely with Museum Manager Philip Miles and his colleagues."*



Volunteer members of East Runton Coastwatch

Meeting the East Runton Coastwatch team

The work of the National Coastwatch Institution keeping a visual watch along the UK shores has always been highly valued by the management team at the Sheringham Shoal Offshore Wind Farm.

A visit on 4 June 2015 to meet the team of volunteers who man the National Coastwatch Station at East Runton, between Sheringham and Cromer on the North Norfolk coast, provided the opportunity for the presentation of a donation from the wind farm to support this station's work.

Sheringham Shoal

Operated by Statkraft



Wind Farm Visitor Centre At The Mo...

- An educational, interactive & fun exhibition; accessible to everyone, group visits welcome.
- Learn about climate change & renewable energy
- Understand the historic importance of wind energy to North Norfolk
- See the development and construction of the wind farm unfold before you
- Learn about the daily operation and maintenance activities at the wind farm

The Sheringham Shoal Wind Farm is expected to generate enough clean energy to power almost 220,000 British homes each year.

Free entry to exhibition
(Normal entry fees apply if combining a visit to the Sheringham Museum).

Open:
March 1st to Nov 1st 2015
Tues to Sat: 10am – 4.30pm
Sundays: Noon – 4pm
Mondays throughout June to September & school holidays.

01263 824482
The Mo, Lifeboat Plain,
Sheringham, NR26 8BG
www.scira.co.uk





The Sheringham Shoal Community Fund

Since its establishment in 2010, the Sheringham Shoal Community Fund has made grant awards totalling over £320,000 to various community groups, charities and schools in North Norfolk.

The fund criteria relate to renewable energy, marine environment and safety, sustainability, or education in these areas. The fund is operated by Norfolk Community Foundation, and a panel made up of local representatives from the community, business and education sectors, sits twice a year to consider applications and award grants. Panel meetings happen in May and November.

Case Study

Lighting the way in Beeston Regis

Beeston Regis is a small community situated between Sheringham and West Runton on the North Norfolk coast. It has around 900 residents living in 500 households and its streets are lit by 58 street lights.

The Sheringham Shoal Community Fund (SSCF) awarded a grant of £6,430 to Beeston Regis Parish Council to help the Council complete a programme of street lighting replacement. With the help of a Norfolk County Council grant, it had previously

replaced 34 of its 58 obsolete street lights with 16 watt low energy lamps. The improvement in the quality of the lighting and the large reduction in both electricity consumption and the lighting maintenance costs following this first phase of replacements encouraged the councillors to approach the SSCF.

The SSCF grant enabled Beeston Regis Parish Council to replace the remaining 24 street lights and the residents are reported to be delighted with the effect of their new lighting. The design of the lamps means that almost 100% of the light is focussed directly downwards, resulting in light pollution being as near to zero as is currently achievable.

Parish Clerk Peter Bullimore said: "Beeston Regis now has clear night skies and is far more carbon efficient than previously as a result of considerably lower emissions."

The street lighting infrastructure is wholly owned by Beeston Regis Parish Council, meaning that it is also totally responsible for the associated costs of electricity and maintenance. The latest cost comparisons indicate that the new lighting is enabling the Parish Council to achieve an annual 65% saving on street lighting.



New low energy street lighting in Beeston Regis

Questions from the community...

How often is each wind turbine serviced?

Each of the Sheringham Shoal's 88 wind turbines receives an annual service, and the Year 3 service schedule has just commenced.

If a wind turbine fails due to unforeseen problems, there are dedicated teams of 'troubleshooting' technicians who go out to sea to fix those problems; whilst there they will also check that the turbine is generally well maintained and topped up with grease and oil.

Is the dredging in Wells-next-the-Sea harbour related to the vessels which work on the Wind farm?

The regular channel dredging at Wells-next-the-Sea certainly extends the times when the wind farm's personnel transfer vessels can leave and enter the harbour, but more importantly it ensures that the harbour remains accessible for commercial and leisure users alike. Wells is a working port that has a big influence on the local economy and the prosperity of the town and its surrounding communities.

If you would like a question answered in the next newsletter, please email info@scira.co.uk

Contact details and more information

Sheringham Shoal is owned by Statoil, Statkraft and the Green Investment Bank through Scira Offshore Energy Limited. Statkraft is the operator for the Sheringham Shoal Offshore Wind Farm. Scira Offshore Energy Limited is the legal entity.

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