

UK Green Investment Bank invests in Sheringham Shoal Offshore Wind Farm



Late in 2014 the UK's Green Investment bank (GIB) invested £240m in the UK's offshore wind energy sector when it purchased a 20% stake in Scira Offshore Energy Limited, the owner of the Sheringham Shoal Offshore Wind Farm, from Statoil and Statkraft.

This investment was part of a wider strategy being led by GIB to further strengthen the UK offshore wind

industry by enabling developers to recycle capital into new projects and to attract new investors into the sector.

Statkraft and Statoil have each retained a 40% stake in the business, and Statkraft remains the operator of the wind farm.

"Statkraft is very pleased to have the UK Green Investment Bank as a new partner in the Sheringham Shoal Offshore Wind Farm", said Olav Hetland, Statkraft's

Senior Vice President for Offshore Wind.

He continued: "As Europe's leader in renewable energy and a long term investor in the UK, we have clearly defined growth ambitions in the UK's offshore wind sector. This agreement will enable us to make further investment in project development, whilst at the same time maintaining our industry role as operator of the Sheringham Shoal Offshore Wind Farm."

Power for UK homes

The latest published statistics show that a record amount of electricity was generated by wind during the 2014 calendar year, enough to supply the needs of more than 25% of the UK's 6.7 million homes. This represents a 15% increase on the amount generated in the 2013 calendar year; a rise from 24.5TWh to 28.1TWh.

The Sheringham Shoal Offshore Wind Farm delivered 1088GWh in 2014 which, using the average annual domestic consumption figure of 4.192MWh in DECC DUKES, is sufficient electricity for 260,000 UK homes.

Overall, in 2014 wind power, including National Grid connected projects and single turbines connected to local networks, provided 9.3% of the UK's total electricity supply, a rise of 1.5% when compared with 2013.

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National Grid compliance project at Salle onshore substation

In order to comply with the requirements of the National Grid, two harmonic filters now need to be fitted to the Sheringham Shoal's onshore electricity substation at Salle in the Broadland district of Norfolk.

On January 21 2015, the project team at the Sheringham Shoal Offshore Wind Farm responsible for this construction project, held a public drop-in exhibition in Cawston Village Hall in order that local residents could learn more about the project and its timescales, and 49 people came along to find out what it was all about.

Construction works are scheduled to commence in late April 2015 and the intention is for the site to be demobilised by the end of November 2015. The works will be carried out by the contractor Alstom, who will be responsible for the engineering, procurement, construction, installation and commissioning of the plant. Alstom was selected on the basis of its experience and reputation in similar projects.



New equipment positioning at the Salle onshore electricity substation

Harmonic filters are used to 'clean' the waveform produced by the wind farm. Each filter consists of a combination of resistors, capacitors and reactors, and the total height of each filter will not exceed 6.7m above ground level. The filters will be housed in a compound on the southeast side of the substation on land already owned by Blue Transmission Sheringham Shoal, and landscaping will be undertaken to reinstate native vegetation.



Alstom's John Toone meeting residents at the drop-in exhibition

Recent arrivals at Wind Farm Place

Six new employees have started work at Wind Farm Place, the Sheringham Shoal Offshore Wind Farm's O&M base, over the last six months, including Mechanical Engineer Daly Symonds.

Brian Short and Nigel Webster have joined as Marine Co-ordinators, whilst the O&M team has been strengthened with the arrival of Daniel Hooks as O&M Co-ordinator and Mickala Smith as O&M Team Assistant.

Also new to the business is Hayley Riley who is a Procurement Assistant on a 6 month contract, and Trainee Sara Baumgarten has just arrived from Statkraft's Head office in Oslo to spend six months working on SAP with the SAP Advisor Ian Daniel.

Congratulations... to James Cooke who has been promoted from his position as Lead Electrical Engineer (PGGO) at Sheringham Shoal Offshore Wind Farm to Technical Manager UK responsible for power generating technology at all Statkraft owned UK onshore and offshore wind farms and its hydro-power plant at Rheidol in Wales.



Wind Farm Place at Egmere

Local Initiatives...

Sheringham Shoal Visitor Centre welcomes educational visits

The Sheringham Shoal Visitor Centre is based in The Mo, which houses the Sheringham Museum, on the seafront at Sheringham, one of North Norfolk's most charming seaside towns. Since the Visitor Centre opened in 2011, it has become one of the region's tourist attractions, welcoming around 18,000 visitors in 2014.

However, as well as serving as a tourist destination, it also provides a valuable source of learning to school children and students of all ages.

The team at the Sheringham Shoal Offshore Wind Farm receives many requests from schools and colleges asking if somebody can visit them to give a presentation about wind energy and the operation of an offshore wind farm. Regrettably, the manpower in what is now a fully operational power

plant is not sufficient to be able to undertake such visits and presentations.

However, educational groups are always welcome to come to the Visitor Centre, and usually, with a little notice, it is possible to arrange an introductory talk to such groups. Group leaders are invited to contact Philip Miles at **The Mo** on **01263 824482** to discuss their plans.

Making history

When it was decided to bury a time capsule in the new stone floor in Saint Nicholas Church in Wells-next-the-Sea, the Sheringham Shoal Offshore Wind Farm was delighted to be asked to contribute a set of its newsletters and fact sheets for inclusion in it.

The new floor is expected to have a life of 500 years – what form will energy be taking in 2515 we wonder?!

Diary date: Greenbuild 2015

Greenbuild 2015 takes place in **Felbrigg Park near Cromer, Norfolk NR11 8PR** on **Saturday 5th and Sunday 6th September 2015**, and the Sheringham Shoal Offshore Wind Farm will have a community information marquee at this event.

Please come and say Hello!

French Mayors come to North Norfolk

The French company WPD Offshore is hoping to construct a 500 MW wind farm 9 miles (15 km) off the coast of the island of Ile d'Oleron in the Atlantic Ocean. Ile d'Oleron is France's largest island after Corsica, and is connected to the west coast of mainland France by a bridge which is approached via the town of Marennes.

The island has 22,000 inhabitants located across its 8 communes, and in September 2014 the Mayors from 7 of those communes visited North Norfolk to learn more about the operation of the Sheringham Shoal Offshore Wind Farm, and its effect on the local economy. North Norfolk and the Ile d'Oleron have much in common, both being coastal tourist destinations surrounded by beautiful countryside and this proposed French wind farm development will be the same distance from the coast as the Sheringham Shoal Offshore Wind Farm.

On a glorious September day, the Mayors visited the Outer Harbour at Wells-next-the-Sea, the O&M base at Wind Farm Place, Egmere and the Sheringham Shoal Visitor Centre at The Mo in Sheringham. A post visit report indicated they were impressed with everything they saw and heard about the way in which the North Norfolk community has accepted and benefitted from the Sheringham Shoal project.



French Mayors from the Ile d'Oleron outside Wind Farm Place

MPI Workboats take over at Sheringham Shoal

MPI Workboats has been awarded the contract to supply three passenger transfer vessels (PTVs) and crews to transport turbine technicians to the Sheringham Shoal Offshore Wind Farm to carry out the maintenance work which is essential to the efficient operation of this 88 turbine wind farm.

MPI will take over from Tidal Transit when its charter contracts with Sheringham Shoal expire during the first half of 2015. The vessels, which will operate from the Outer Harbour at Wells-next-the-Sea, are each capable of carrying 12 passengers, 3 crew members and two 10 foot equipment containers.

MPI Snowball will arrive in March 2015 and will be followed by MPI Altisidora in

April 2015 and MPI Lucinda in June 2015.

Commenting on the award of this charter contract to MPI Workboats, Bjorn Mo Østgren, the General Manager of the Sheringham Shoal Offshore Wind Farm, said: "We have enjoyed a good working relationship with Tidal Transit during its charter contracts, and I am sure that we shall quickly establish a similar relationship with MPI Workboats and its crews."



MPI Workboats will have three PTVs working at Sheringham Shoal by June 2015

The Sheringham Shoal Community Fund

Since its establishment in 2010, the Sheringham Shoal Community Fund has made grant awards totalling around £280,000 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

Sheringham Shoal Community Fund helps people 'get on their bikes'

The Sheringham Shoal Community Fund (SSCF) has awarded a grant of £6,800 to Kickstart of Dereham to invest in energy-efficient electric mopeds.

In rural counties such as Norfolk, travelling long distances to work or college for those reliant on public transport may be impossible, or if not impossible, constraining. Buses and trains do not always run at convenient times.

Kickstart began for this reason. Two ladies bought mopeds, out of their own pockets, for the use of two local youngsters who needed to get to college. Two bikes became ten, when in 2000, the husband of one of the ladies researched funding for the project. His success enabled him to register Kickstart as a charity, increase the number of bikes to 40, and hire premises in Dereham. Despite its ups and downs, today it employs nine members of staff, has a fleet of 261 mopeds, is 100% self-funding, and is the country's largest operation of its kind.

Dale Curtis took over as Project Manager in 2012; by then, funding had dropped and he needed to find ways of sustaining income. "Fortunately, Norfolk County Council could see the benefits of the operation, and gave us a one-off grant to plug the gap while we got back on our feet. We built up our fleet by investing in more petrol-driven mopeds – the best option available at the time," Dale explained.

However, Dale's vision was to expand the fleet with energy-efficient, greener, lighter, electric mopeds. He found a Yamaha



Dale Curtis with the five Yamaha electric mopeds

machine with a battery pack that allows it to run for 35 miles before recharging from a domestic supply, with the same speed as a 50cc petrol moped.

Armed with the facts, Dale applied to the SSCF for a grant to purchase the mopeds. The application was successful, and Kickstart took delivery of five Yamaha mopeds on 22nd December 2014.

The plan is to implement a 6-month trial to compare cost, reliability and ease of use, with petrol-driven vehicles. "With a limited range before a 6-hour recharge, these mopeds won't be suitable for all our clients," explains Dale. "They will be used mainly for people who just need to get to work or college and back home. But if the trials are successful, I would like to see 50% of our fleet being electric mopeds in the future.

"I am grateful to the SSCF for allowing Kickstart to start down the road of clean energy. Development of the battery pack has taken colossal strides recently, and there is huge on-going investment. I'm very optimistic that we shall be able to go down this route in the future."

Questions from the community...

How many people now work at the Sheringham Shoal Offshore Wind Farm?

Currently there are 82 people working from Wind Farm Place, of which 9 are contractors. Statkraft employs 30 individuals whilst 43 work for Siemens.

Are marine mammal and bird surveys still undertaken on a regular basis at the wind farm site?

Scira's marine licence requires the Sheringham Shoal Wind Farm team to continue to undertake marine mammal and bird surveys. Depending on the time of the year, the vessel **Scotia W** leaves Grimsby between one and three times a month to conduct marine mammal and sea bird surveys. Additionally, between April and September each year, a Sandwich Tern tracking survey is undertaken as the wind farm is located within the flight path of this protected bird species.

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

Contact details and more information

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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.