

World's most powerful wind turbine successfully installed in Scottish waters

First deployment of the 11 innovative turbines for Vattenfall's European Offshore Wind Deployment Centre marks treble project breakthrough for offshore wind industry

A hat-trick of offshore wind industry firsts has been achieved within a fortnight in North-east Scotland after the world's most powerful single turbine was successfully installed yesterday (Monday, April 9) for Vattenfall's ground-breaking European Offshore Wind Deployment Centre (EOWDC).

The turbine is the first of 11 to be deployed at the ground-breaking facility in Aberdeen Bay. In addition, Vattenfall today confirmed that it is one of two turbines that have been significantly enhanced with further internal power modes to generate more clean energy from the EOWDC. The two turbines have each increased from 8.4MW to 8.8MW and yesterday's installation represents the first time an 8.8 MW model has been deployed commercially in the offshore wind industry.

Together with the nine 8.4MW turbines, this substantially boosts the EOWDC's output to 93.2MW. This allows the facility to produce the equivalent of more than 70% of Aberdeen's domestic electricity demand and annually displace 134,128 tonnes of CO₂.

Yesterday's feat of engineering comes less than two weeks after the first of the EOWDC's game-changing suction bucket jacket foundations was successfully installed. The EOWDC is the first offshore wind project to deploy the foundations at commercial scale and pairing them with the world's most powerful turbines represents another industry first.

Gunnar Groebler, Vattenfall's Head of Business Area Wind, said: "The turbines for the EOWDC, Scotland's largest offshore wind test and demonstration facility, help secure Vattenfall's vision to be fossil fuel free within one generation. The EOWDC, through its innovative approach to cost reduction and pioneering technologies, leads the industry drive towards generating clean and competitive wind energy power – one that will reinforce Scotland's global energy status."

MHI Vestas has specially designed the V164-8.4 MW and V164-8.8 MW turbines which all have a tip height of 191 metres. Each blade is 80m long - slightly taller than Aberdeen's Marischal College – and the 164m rotor has a circumference larger than that of the London Eye's.

EOWDC project director at Vattenfall, Adam Ezzamel, said: "The first turbine installation is a significant achievement and credit to the diligence and engineering know-how of the project team and contractors. For it to be one of the 8.8MW models

makes it an even more momentous moment because it further endorses the EOWDC as a world-class hub of offshore wind innovation.

“We are very excited by the cutting-edge technology deployed on all the turbines and it is remarkable that just one rotation of the blades can power the average UK home for a day.”

MHI Vestas Chief Operations Officer, Flemming Ougaard, said, “We are very pleased to have installed the first of 11 turbines at Aberdeen Bay. Our collaboration with Vattenfall not only provides clean wind energy for the UK, but also is an important opportunity for us to gain valuable experience with several different technologies. We look forward to the successful installation of the remaining turbines.”

The turbines are being transported from Esbjerg to Aberdeen by Swire Blue Ocean’s vessel, the Pacific Orca, where they will be lifted into position on the installed foundations. The Pacific Orca is believed to be the world’s largest wind farm installation vessel.

Jean Morrison, Chair of Aberdeen Renewable Energy Group (AREG), said: “The EOWDC is leading the way in terms of innovation for the offshore wind sector and will help enable the next generation of offshore wind. It’s a real coup for the region to have the world’s most powerful turbines on its doorstep and cements Aberdeen’s position as a major global energy city. It also will lead us to a greener future.”

Ends

For further information, please contact:

! Karen Grant, BIG Partnership - 07805 436 957 or karen.grant@bigpartnership.co.uk

! **Please note** that more photography and video footage is available on request.

Notes to editor:

More information on the project [here](#)

Follow the progress of the installation on [Twitter](#).

Note: Sole responsibility for this document lies with the author. The European Union (EU) is not responsible for any use that may be made of the information contained therein.

The European Offshore Wind Deployment Centre is also known as Aberdeen Offshore Wind Farm.

Vattenfall is a leading European energy company, that for more than 100 years has electrified industries, supplied energy to people’s homes and modernised our way of

Press release



living through innovation and cooperation. We now want to make fossil-free living possible within one generation.

Therefore, we are driving the transition to a more sustainable energy system through growth in renewable production and climate smart energy solutions for our customers. We employ approximately 20,000 people and have operations mainly in Sweden, Germany, the Netherlands, Denmark, the UK and Finland. Vattenfall is owned by the Swedish state. For more information: www.corporate.vattenfall.com

MHI Vestas Offshore Wind is a joint venture between Vestas Wind Systems A/S 50% and Mitsubishi Heavy Industries (MHI) 50%. The company's focus is to design, manufacture, install and service wind turbines for the offshore wind industry. The company aims to create sustainable value through offshore wind power by driving capital and operating savings and increasing the power output of wind turbines. An innovative force in offshore wind since its inception in 2014, the company is guided by its founding principles of collaboration, trust, technology and commitment. For more information, see www.mhivestasoffshore.com or follow [@MHIVestas](https://twitter.com/MHIVestas) on Twitter.