

Siemens to supply offshore wind turbines to world's largest floating wind farm

- **30 MW “Hywind Scotland” project with five Siemens turbines of Six-Megawatt-class**
- **Collaboration on floating wind turbines started in 2009**

Siemens is strengthening its collaboration with Norwegian company Statoil on floating offshore wind turbines. For the 30 megawatt (MW) Hywind Scotland Project, Siemens will supply five of its SWT-6.0-154 direct drive offshore wind turbines. The turbines will be installed on floating foundations operating in water depths between 90 and 120 meters. The world's largest floating wind project is located in Scottish waters 25 kilometers off the coast of Peterhead in Aberdeenshire. For the new Hywind Scotland Project, assembly in West Coast Norway is scheduled for first half 2017. In 2009 Statoil and Siemens successfully installed a 2.3 MW Siemens turbine at the first floating full-scale wind project worldwide, Hywind Demo.

This Scottish pilot project demonstrates how future floating concepts for commercial and large scale offshore wind parks can be both cost efficient and low risk. The floating foundations are ballast-stabilized and fastened to the seabed with mooring lines. With their lightweight nacelles, Siemens large direct drive wind turbines are particularly suited for the floating foundations designed as slender cylinder structures. This concept has already proven its effectiveness in the 2009 project. At the same time Siemens gathered a lot of experience on the specific requirements regarding the control parameters on a moving wind turbine under offshore conditions. For the floating installation Siemens' technicians developed new controller settings for rotor pitch and yaw drive regulation.

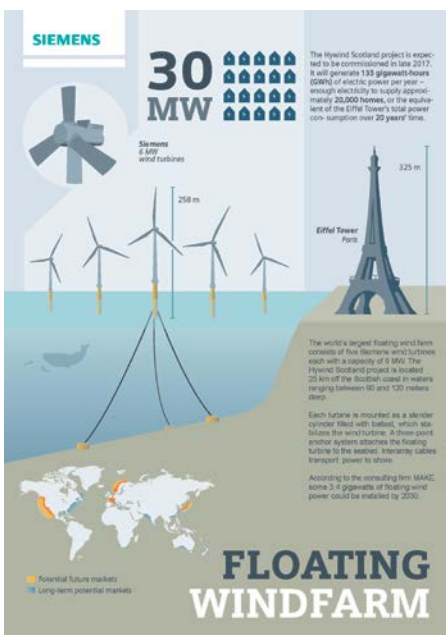
“We are proud to once again be on board the floating wind project with Statoil, and

to apply the experience we gained with the first full scale floater,” said Morten Rasmussen, Head of Technology at Siemens Wind Power and Renewables Division. “Hywind Scotland is another pioneering project and has the potential to become a trailblazer for future floating wind projects.”



First Hywind project in 2009:

In the joint project Siemens and the Norwegian energy company Statoil installed a Siemens SWT-2.3-82 with a 65 meter hub height on a ballast-stabilized floating structure. An enlarged version of this structure serves as the basis for the new Hywind Scotland project, which contains five SWT-6.0-154 wind turbines with a hub height of 103 meter each.



This press release and a **press picture** and **the infographic** are available at:

www.siemens.com/press/PR2015120105WPEN

For further information on Division Wind Power and Renewables, please see:

www.siemens.com/wind

Contact for journalists

Guy Dorrell

Phone: 07808 823177; E-mail: guy.dorrell@siemens.com

Follow us on Twitter at: www.twitter.com/siemens_press

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 165 years. The company is active in more than 200 countries, focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is No. 1 in offshore wind turbine construction, a leading supplier of gas and steam turbines for power generation, a major provider of power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. The company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2015, which ended on September 30, 2015, Siemens generated revenue of €75.6 billion and net income of €7.4 billion. At the end of September 2015, the company had around 348,000 employees worldwide. Further information is available on the Internet at www.siemens.com.