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### **World-leading tidal energy system achieves 5GWh milestone**

**SeaGen, the first commercial-scale tidal stream energy system has achieved a new milestone of 5 gigawatt-hours (GWh) of tidal power generation since starting operation at Strangford Lough in Northern Ireland. That equals the annual power consumption of 1,500 British households. The Siemens-owned system is one of the largest tidal stream power projects today.**

This latest milestone, adding an additional 2GWh of power since January this year, is an exciting development for this proven technology, whose potential for commercial deployment as part of the future energy mix is now recognised. Global carbon reduction commitments are increasing demand for reliable marine current power. Experts are expecting double-digit annual growth rates for this sector up to 2020. The worldwide potential for power generated by tidal power plants is estimated at 800 terawatt-hours (TWh) annually. This is equivalent to between three and four percent of global power consumption.

Dr Andrew Tyler, chief executive officer of Siemens-owned Marine Current Turbines, which developed the SeaGen system said: "This is a very exciting time for tidal energy. SeaGen is a working demonstration of UK innovation, which we hope to export worldwide. As well as our demonstrable technical success in generating electricity at meaningful scale, the backing of Siemens has greatly facilitated our commercialization plans."

The 1.2MW SeaGen system was first deployed in 2008 and it was the world's first commercial-scale, grid-connected tidal stream turbine. SeaGen, which works

much like an “underwater windmill,” currently has the capacity to generate power for the equivalent of about 1,500 homes. Since its deployment, the efficiency and performance of SeaGen has been tested and improved and is expected to be deployed more widely in coastal regions with strong tidal currents, such as the UK, over the next 5-10 years. The two initial tidal array projects, the 8-MW Kyle Rhea project in Scotland and the 10-MW Anglesey Skerries project in Wales, are now in an advanced stage of development.

Commenting on the significance of this latest milestone, Tyler said: “The fact that we have increased our generation by another two GWh in just over half a year is a clear indication that SeaGen has completed the demonstration phase and is now ready for commercialisation. While we continue to learn lessons from the installation in Strangford, we are now highly confident in our ability to deliver a reliable and maintainable system for commercial use.”

Tidal turbines are part of Siemens’ Environmental Portfolio. In fiscal 2011, revenue from the Portfolio totaled about €30 billion, making Siemens one of the world’s largest suppliers of ecofriendly technologies. In the same period, our products and solutions enabled customers to reduce their carbon dioxide (CO2) emissions by nearly 320 million tons, an amount equal to the total annual CO2 emissions of Berlin, Delhi, Hong Kong, Istanbul, London, New York, Singapore and Tokyo.

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#### **Notes to editors**

##### **About Siemens in the UK**

Siemens was established in the United Kingdom 169 years ago and now employs 12,972 people in the UK. Last year’s revenues were £4.4 billion\*. As a leading global engineering and technology services company, Siemens provides innovative solutions to help tackle the world’s major challenges, across the key sectors of energy, industry, infrastructure & cities and healthcare. Siemens has offices and factories throughout the UK, with its headquarters in Frimley, Surrey. The company’s global headquarters is in Munich, Germany. For more information, visit [www.siemens.co.uk](http://www.siemens.co.uk)

\* Data includes intercompany revenue. Data may not be comparable with revenue reported in annual or interim reports.

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**About Marine Current Turbines**

Marine Current Turbines (MCT) is a Siemens-owned tidal power company based in Bristol, England. Founded in 1999, MCT has led the market in developing and patenting tidal current stream energy devices, including SeaGen, the first commercial-scale tidal energy system. It is taking forward tidal projects in UK and overseas waters including a 10MW tidal farm off Anglesey, north Wales (the Skerries), an 8MW tidal farm in Kyle Rhea (Scotland's Isle of Skye) and is working with Minas Basin Pulp & Power to deploy tidal systems in Canada's Bay of Fundy.

MCT was fully acquired by Siemens in March, 2012 and is part of Siemens Solar and Hydro Division. Tidal power systems are part of Siemens' Environmental Portfolio, which totaled EUR30 billion in 2011.

For more information about MCT visit ([www.marineturbines.com](http://www.marineturbines.com))