

## Giant wind turbine breaks 24-hour power record

February 1 2017, by Nancy Owano



Credit: MHI Vestas Offshore Wind

(Tech Xplore)—Turbines that can produce clean energy are always a point of interest and a Denmark-based company is in the news on two counts: a recent launch and the fact that it sets a new world record for



wind power from a single turbine in a space of 24 hours.

The giant turbine breaking the 24-hour power generation record is from Danish company MHI Vestas Offshore Wind and is a prototype. The company's focus is on designing, manufacturing, installing and servicing wind turbines for the offshore wind industry.

Torben Hvid Larsen, the company CTO, said "Our prototype at Østerild sets yet another record for power production, producing 216,000 kWh over a 24 hour period."

The prototype at Østerild broke the energy generation record for a commercially available offshore wind turbine on Thursday 1st December, producing 216,000 kWh (actual figures 215,999.1 kWh) over a 24 hour period, said the news release. The company referred to it as an "uprated 8 MW wind turbine, enabling its 8 MW platform to reach 9 MW at specific site conditions."

VR-Zone commented that "Denmark has bet heavily on wind power since the 1970s, and you'll be hard pressed to travel any greater distance in the country without encountering them." A report in Bloomberg earlier this month said "Denmark gets about 40 percent of its electricity from wind power. The country targets weaning itself off fossil fuels by 2050."

The new turbine is being referred to outside the company as "giant," and its numbers reflect that terminology. "The V164 stands at 722 feet (220 m) at full height, with 38-ton blades that are 263 feet (80 m) in length for a total sweep area of 227,377 square feet (21,124 square meters)," said John Anderson in *New Atlas*.

The company CTO Torben Hvid Larsen was quoted in the company news release: "We are confident that the 9 MW machine has now proven



that it is ready for the market."

Commented John Anderson in *New Atlas*: "the Usain Bolt of wind turbines is essentially in competition with itself, largely due to its superior size over the competition."

Why does size matter?

Anderson wrote, "The larger the size, the greater the efficiency tends to be, meaning a reduction in installation and maintenance costs per kilowatts produced, or more bang for the buck."

Megan Treacy similarly wrote in *TreeHugger*: "The larger the turbine, the larger the power output, which makes offshore wind farms exponentially more efficient and brings down the cost of installation, maintenance and electricity, too."

In its news release, the company also referred to fewer machines needed to meet park capacity.

Torben Hvid Larsen said, "we believe that our wind turbine will play an integral part in enabling the offshore industry to continue to drive down the cost of energy."

The company said this has a 25-year life span. "Apart from generating clean energy, the turbine is also 80 percent recyclable at the end of its 25 year life cycle," said *VR-Zone*.

More information: www.mhivestasoffshore.com/new-24-hour-record/

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