

Offshore wind capacity in Germany passes gigawatt mark

January 20 2015, by Nancy Owano



The Shepherds Flat Wind Farm is an 845 MW wind farm in the U.S. state of Oregon. Credit: Steve Wilson / Wikipedia.

Germany's offshore wind capacity more than doubled last year as investors warm up to the technology, reported Reuters. The increase was from 915 megawatts (MW) at the end of 2013 to 2.35 gigawatts (GW) at the end of 2014. As such, reported Paul Dvorak in *Windpower Engineering and Development*, "The German market for offshore [wind](#)

[energy projects](#) broke through the gigawatt barrier in 2014.

By 31 December, 258 [offshore wind turbines](#) in the German North and Baltic Seas with a total capacity of 1,049.2 MW fed into the grid." Reuters said that according to VDMA out of the 2.35 GW, about 1.05 GW were connected to the [power grid](#). There is a need to speed up network connections if Germany's goal is to be met in having 6.5 GW of capacity installed and connected by 2020. Overall, 543 offshore wind turbines have been installed off Germany's coast so far, said Reuters. Cat DiStasio in *Inhabitat* said the jump was "thanks to the work" of those 543 offshore [wind turbines](#) that established Germany's [offshore wind power](#) capacity at 2.35 gigawatts (GW) and that the [growth spurt](#) demonstrated that Germany was "very serious in the pursuit of their goals concerning green energy."

Windpower Engineering & Development referred to remarks by Hermann Albers, president of the German Wind Energy Association BWE, who said the offshore technology was on the edge of a decisive breakthrough, and, more than ever, "a reliable legal framework" was decisive for future development. "Only when investment security is ensured, it will be possible to fully exploit the cost reduction potential, maintain Germany's leading technological position, and harness export success on a growing global market."

DiStasio remarked, "Why capacity and not actual wind power? The infrastructure hasn't caught up. According to VDMA, only about 1.05 gigawatts of the current capacity are connected to the power grid. The rest will be tapped into as soon as network connections are [sped](#) up."

Reuters provided some perspective on the [wind power](#) potential. On the plus side, offshore parks in contrast to onshore farms face no limit on turbine size. Another edge is that they can take advantage of steady sea winds that allow them to turn about 42 percent of the [time](#), about double

the "load factor" onshore. At the same time, "accounting for less than 1 percent of Europe's power consumption, it remains a niche technology for now, hampered by high costs and limited evidence on long-term impact from storms."

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