

# Wind output in Denmark last year was a record-setter

9 January 2018, by Nancy Owano



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An impressive share of a country's energy consumption through wind? That is one more sign of wind energy's potential as countries look for cleaner energy alternatives. The spotlight goes on Denmark.

Wind covered 43.6% of Denmark's 2017 power demand.

Energy watchers are posting reports that Denmark set a wind energy record, regarding wind power in 2017. Namely, wind turbines delivered power equivalent to 43.6 percent of Denmark's [electricity consumption](#) that year. *Planetsave* called it a milestone.

*Energy Voice* said the 43.6 percent number involved both offshore and onshore wind turbines.

"Preliminary data from the Danish transmission system operator Energinet, [published](#) by DEA on Wednesday, show that [wind farms](#) in the country generated 14,700 GWh of electricity in the past [12 months](#), setting a new production record," according to *Renewables Now*.

"By 2020, wind is expected to reach 50 percent of the electricity consumption in the country. In total, renewable energy, including solar and sustainable biomass, will cover 80 percent of [electricity](#) consumption in Denmark," wrote Jesper Berggreen in *Planetsave*.

Interestingly, the actual number of turbines in the country is down.

Currently, there are approximately 20% fewer wind turbines in the [country](#) than in 2001, said *State of Green*.

Though the number is fewer, the wind turbines are larger and can produce more energy. Julia Simpson in *Political Lore* said in Denmark in 2017, about 6,100 wind turbines were in [service](#).

Overall, capacity in Denmark has more than doubled since 2001, with wind capacity installed on land and water.

A number of observations about today's newer turbines surfaced along with the Denmark record news.

*Financial Times*: "Thanks to a series of little-recognised technological advances, wind power has become far more cost-effective and prevalent than expected." Turbine generating capacity in many early wind farms 25 years ago was measured in kilowatts, wrote Pilita Clark, and produced only enough [power](#) for a handful of average-sized homes in a country such as the US.

"Today they have been [supplanted](#) by far more powerful turbines that can each supply hundreds of homes."

Orsted is an operator of offshore wind farms; Clark quoted its UK managing director, Matthew Wright, who said, "more electricity can be generated from fewer turbines that cost less to install and maintain

than a cluster of smaller machines."

All in all, "Out of all OECD countries Denmark has produced the most [energy](#) from [wind turbines](#) per capita over the last 15 years," said a report last year in *State of Green*.

Supporters of [wind energy](#) tout it as a stable, inexpensive and clean alternative to fossil fuels.

Denmark has some of the best wind condition is in the world. Its ambition to leverage its advantage in [wind power](#) goes back to 1979, when the first commercial [wind](#) turbine was installed, according to the official website of [Denmark](#). This was a Vestas 30 kW turbine.

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