

Wind energy is becoming increasingly affordable

The costs of wind energy are falling everywhere, and renewable energies are now the most cost-effective form of electricity generation in many places. Hundreds of billions of dollars are invested in this technology worldwide. However, Germany has lost some of its attractiveness.

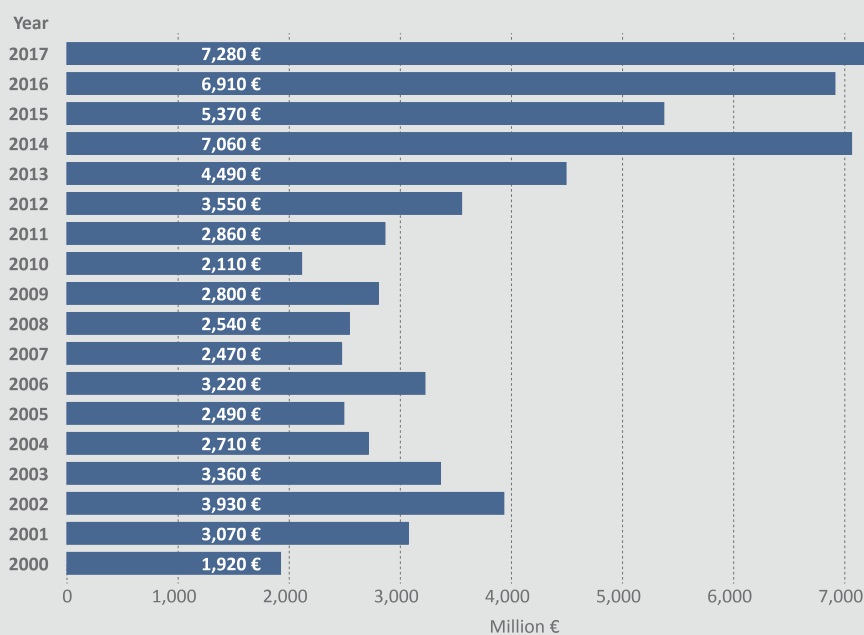
In the second bidding round in May 2019, the average project award value for onshore wind energy in Germany rose slightly from 6.11 cents per kilowatt hour of electricity generated (ct/kWh) to 6.13 cents compared to the first round. This represents a further increase compared to the average value of the four bidding rounds in 2018, which came to 5.6 ct/kWh. Experts see the reason for this above all in the lack of competition: the auctions were clearly undersubscribed; there was more supply than demand.

“The difficult situation with regard to permits for the installation of wind turbines by the responsible state authorities continues to have a decisive influence on the tendering procedure and result”, explained the Federal Network Agency responsible for the auctions. The wind industry in Germany is currently in a difficult situation: more and more projects are stuck in long approval procedures due to nature conservation conflicts or are subject to complaints; the expansion has seen a massive decline (p. 10).

Despite the current exceptional situation in Germany, the costs of renewable energies in general and wind energy in particular continue to fall. According to the Renewable Power Generation Costs 2018 report of the International Renewable Energy Agency (IRENA), renewable energies are the most cost-effective form of electricity generation in most parts of the world. As per the report, the worldwide weighted average electricity production costs for onshore wind fell by 13 percent compared to 2017 – to 5.6 US cents per kilowatt hour.

GERMANY BETWEEN 2000 AND 2017

Investments in the installation of onshore wind turbines



Source: Working Group on Renewable Energy Statistics (AGEE-Stat)



RWE lignite power station in Weisweiler.
Photo: Paul-Langrock.de

“The costs for electricity from onshore wind energy are now at the lower end of the cost range for fossil fuels”, IRENA says. Costs for offshore wind energy fell by one percent. The agency assumes that the cost reductions for renewable energies will continue in the coming decades.

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France has the most attractive investment conditions

According to Bloomberg New Energy Finance 2018, over 332 billion US dollars have been invested in renewables worldwide. For the fifth time in a row, investments in renewable energies exceeded 300 billion dollars. Wind energy accounted for 128.6 billion dollars, an increase of three percent. In Europe, the wind industry invested 65 billion euros, of which 26.7 billion euros were invested in new wind farms, and the remainder in refinancing transactions or project and company acquisitions (figures from the Wind Europe umbrella association). At 60 percent, the wind industry accounts for the largest share of all investments in new electricity capacity.



Coquelicot wind farm, France. Photo: Jan Oelker

According to the Allianz Climate and Energy Monitor 2018 of Allianz Insurance, the NewClimate Institute, and the environmental organisation Germanwatch, the most attractive investment conditions for renewables currently prevail in France when comparing the G20 states. Germany dropped to second place. “Germany moved down one place as the quality of the overall renewable energy policy environment deteriorates and there are some shortcomings in policy-making”, the report says. In the 53rd country attractiveness index for renewable energies of the consulting firm EY, Germany has even fallen by two places and now ranks sixth.



Rotor blade transport to Saint-Georges-les-Bains wind farm, France.
Photo: Jan Oelker