

AWEA 2016 report: Minnesota is 6th in nation for total wind power generated

Wind turbines in Minnesota generated 10.63 million megawatt hours (MWh) of electricity in 2016, the sixth highest wind-generated electricity total for states in the nation, according to the *U.S Wind Industry Annual Market Report* Year Ending 2016, released April 19 by the American Wind Energy Association (AWEA). Minnesota moved up from seventh place in 2015. Minnesota is home to 2,327 wind turbines that produced enough electricity to power 983,000 homes.

Minnesota produced 17.7% of its electricity from wind power in 2016 (up from 17.0% in 2015), ranking it sixth best for wind energy as a percent of total state electricity generation. Iowa led the nation by producing 36.6% of its electricity from wind; five states (Iowa, South Dakota, Kansas, Oklahoma, and North Dakota) generated at least 20% of their electricity from wind energy.

Minnesota ranked seventh in the nation for newly installed wind power in 2016 with 291 MW. Texas ranked No. 1 in new wind generation for 2016 with 2,611 MW and Oklahoma was second with 1,462 MW.

Top 10 States for Wind Generation

Total Wind Generation (Thousand MWh)
57,551
20,049
19,526

4. Kansas	14,113
5. California	13,698
6. Minnesota	10,637
7. Illinois	10,627
8. Colorado	9,425
9. North Dakota	8,080
10. Washington	8,042

Economic impact

Minnesota has been successful at attracting investment for wind energy manufacturing and large wind energy projects, with at least 20 active manufacturing facilities in the state, according to the AWEA Minnesota Wind Energy profile. The economic impact of wind includes:

- About 4,000 direct and indirect jobs supported in 2016
- Total capital investment of \$6.8 billion through 2016
- Annual land lease payments to landowners of \$10-15 million; Minnesota is one of seven states that receives more than \$10 million

Environmental benefits

Generating wind power creates no emissions and uses virtually no water. Environmental benefits include:

- 2016 annual state water consumptions savings*: 3.1 billion gallons
- 2016 equivalent number of water bottles saved: 23.2 billion
- 2016 annual state carbon dioxide emissions avoided: 5.5 million metric tons
- 2016 equivalent cars worth of emissions avoided: 1.2 million

*Based on national average water consumption factors for coal and gas plants

See the <u>AWEA Minnesota Wind Energy profile (pdf)</u> for more information.

U.S. wind performance

The U.S. wind industry installed 8,203 MW in 2016 and the industry now has 82,143 MW installed, or enough to power 24 million American homes. Wind power passed hydroelectric power to become the No. 1 source of renewable generating capacity in 2016. For the first time in history, there are more than 100,000 Americans employed in the U.S. wind energy industry. More than 15,000 jobs were added, bringing the total to 102,500. Wind turbine technician is America's fastest growing job.

Minnesota-based Xcel Energy continues to rank No. 1 among U.S. wind power purchasing electric utilities for wind power capacity owned or under contract, with a total of 6,686 MW at the end of 2016. Read more about the 2016 AWEA Wind Industry Report.