WIND ENERGY IN NEBRASKA

Wind energy means economic development for Nebraska.

Nebraska stands out as an emerging wind powerhouse. Nebraska now has over 2,300 MW of installed wind power and ranks 12th in the nation for installed capacity, with a total capital investment of over \$3.8 billion. In 2019, wind power generated 19.9 percent of Nebraska's electricity, ranking 7th in the nation for wind energy as a share of total electricity generation. Harnessing more of Nebraska's wind potential could make the state a powerhouse for the wind industry while providing savings for electricity customers.

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Jobs & Economic Benefits

The U.S. wind industry is a major economic development driver. In addition to job creation and billions of dollars in project investment, the wind industry invests heavily in local communities, providing significant revenue in the form of property, state, and local taxes.

- Direct wind industry jobs in 2019: 2,001 to 3,000
- Capital investment in wind projects through 2019*: \$3.8 billion
- Annual state and local tax payments by wind projects**: **\$12 million**
- Annual land lease payments: \$14.7 million • *Based on state and national averages from LBNL, NREL. **Based on member data. Includes PILOT payments.

Wind-Related Manufacturing

Over 500 manufacturing facilities in the U.S. make products for the wind industry, from blades, towers, and turbine nacelles to raw components such as fiberglass and steel.

Number of active manufacturing facilities in the • state: 1



Wind Projects as of Q2 2020

- Installed wind capacity: 2,364 MW
 - » State rank for installed wind capacity: 12th
- Number of wind turbines: 1,127
 - » State rank for number of wind turbines: 15th
- Wind projects online: 27 (Projects larger than 10 MW: 20)
- Wind capacity under construction: 773 MW
- Wind capacity in advanced development: 200 MW

Wind Generation

In 2019, wind energy provided **19.90%** of all in-state electricity production.

- State rank for share of electricity: 7th
- Equivalent number of homes powered by wind in 2019: 680,200

Wind Energy Potential

• Land-based technical wind potential at 80 m hub height: **465,474 MW** (Source: AWS Truepower, NREL)

Environmental Benefits

Wind energy reduces emissions and water consumption by avoiding generation from fossil-fuel power plants.

- In-state carbon dioxide emissions avoided in 2019*: 1.4 million metric tons
 - » Equivalent cars' worth of emissions avoided: 290,000
- In-state water consumption savings in 2019**: 715 million gallons

*Estimated using Aurora power sector model.

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

Nebraska

The state of Nebraska does not currently have a renewable portfolio standard or goal set in place to require utilities to generate a certain percentage of electricity from renewable sources.





