

# WIND ENERGY IN NEBRASKA



## Nebraska is a national leader in wind resource potential.

Nebraska is one of the top states in the country for potential wind energy generation, with a technical potential of approximately 465,000 megawatts (MW) according to NREL. Nebraska now has 1,972 MW of installed wind power and ranks 15th in the nation for installed capacity. Harnessing more of Nebraska's wind potential could make the state a powerhouse for the wind industry while providing savings for electricity customers. The state lies in the Southwest Power Pool (SPP), where wind power saved electricity customers \$1.2 billion in 2013.

## BENEFITS 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.

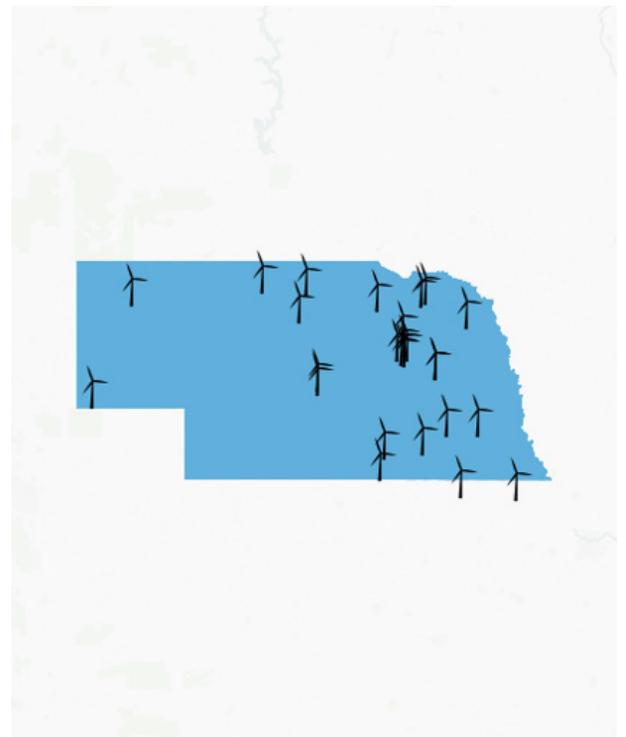
- Direct wind industry jobs in 2018: **3,001 to 4,000**
- Capital investment in wind projects through 2018\*: **\$3.5 billion**
- Annual state and local tax payments by wind projects: **\$8.5 million**
- Annual land lease payments\*: **\$5 - \$10 million**

\*Source: Based on state and national averages from LBNL, NREL

## 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: **0**



 Online Wind Project  Wind-related Manufacturing Facility

## Wind Projects as of 3Q 2019

- Installed wind capacity: **1,972 MW**
  - » State rank for installed wind capacity: **15th**
- Number of wind turbines: **974**
  - » State rank for number of wind turbines: **17th**
- Wind projects online: **25** (Projects larger than 10 MW: 18)
- Wind capacity under construction: **871 MW**
- Wind capacity in advanced development: **266 MW**

## Wind Generation

In 2018, wind energy provided **14.1%** of all in-state electricity production.

- State rank for share of electricity: **13th**
- Equivalent number of homes powered by wind in 2018: **497,900**

## Wind Energy Potential

- Land-based technical wind potential at 80 m hub height: **465,474 MW**  
(Source: AWS Truepower, NREL)
- Offshore net technical wind potential at 100 m hub height: **NA MW** (Source: NREL)

## Environmental Benefits

Generating wind power creates no emissions and uses virtually no water.

- 2018 annual state water consumption savings\*: **3.5 billion gallons**
- 2018 equivalent number of water bottles saved: **26 billion**
- 2018 annual state carbon dioxide (CO<sub>2</sub>) emissions avoided: **6.4 million metric tons**
- 2018 equivalent cars' worth of emissions avoided: **1.4 million**

\*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.

