Oklahoma is a national leader in the wind energy industry.

Oklahoma ranks third nationwide for installed wind capacity and second for total wind energy generation, providing enough electricity to power the equivalent of 2.6 million average U.S. homes in 2018. This wind energy directly translates into cost savings for electricity customers, saving SPP customers $1.2 billion in 2013. Oklahoma’s incredible wind resource also provides economic development, paying $23.5 million annually in state and local taxes and supporting over 7,000 direct jobs in 2018.

**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: **7,001 to 8,000**
- Capital investment in wind projects through 2018*: **$14.7 billion**
- Annual state and local tax payments by wind projects: **$23.5 million**
- Annual land lease payments*: **$20 - $30 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: **7**
Wind Projects as of 4Q 2019
- Installed wind capacity: **8,172 MW**
  - State rank for installed wind capacity: **3rd**
- Number of wind turbines: **4,013**
  - State rank for number of wind turbines: **4th**
- Wind projects online: **45** (Projects larger than 10 MW: **44**)
- Wind capacity under construction: **1,415 MW**
- Wind capacity in advanced development: **1,934 MW**

Wind Generation
In 2018, wind energy provided **31.7%** of all in-state electricity production.
- State rank for share of electricity: **3rd**
- Equivalent number of homes powered by wind in 2018: **2,653,200**

Wind Energy Potential
- Land-based technical wind potential at 80 m hub height: **359,434 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*: **5.2 billion gallons**
- 2018 equivalent number of water bottles saved: **39 billion**
- 2018 annual state carbon dioxide (CO₂) emissions avoided: **11.1 million metric tons**
- 2018 equivalent cars’ worth of emissions avoided: **2.4 million**
*Based on national average water consumption factors for coal and gas plants.

Renewable Portfolio Goal
In 2010, Oklahoma set a renewable energy target for 15 percent of total installed generation capacity for operating electric utilities to be renewable sources by 2015. Wind energy has historically been the renewable resource chosen to meet renewable energy targets.