Oklahoma is a national leader in the wind energy industry.

Oklahoma ranks third nationwide for installed wind capacity and total wind energy generation, providing enough electricity to power the equivalent of 1.8 million average U.S. homes in 2016. 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 annual land lease payments to landowners and supporting 8,001 to 9,000 direct and indirect jobs in 2016. A recent study from Oklahoma State University found that wind companies have paid nearly $134 million in ad valorem taxes to the state since 2004, increasing revenues for local schools and county services.

Jobs & Economic

An investment in wind power is an investment in jobs, including jobs in operations and maintenance, construction, manufacturing and many support sectors. In addition, wind projects produce lease payments for landowners and increase the tax base of communities.

- 2016 direct and indirect jobs supported: 8,001 to 9,000
- Total capital investment through 2016: $12.3 billion
- Annual land lease payments: $15-20 million

Wind-Related Manufacturing

The United States has over 500 manufacturing facilities producing products for the wind industry that range from blade, tower and turbine nacelle assembly facilities to raw component suppliers, including fiberglass and steel.

- Number of active manufacturing facilities in the state: 7
Wind Projects

- **Installed wind capacity:** 6,645 MW
- **State rank for installed wind capacity:** 3rd
- **Number of wind turbines:** 3,394
- **State rank for number of wind turbines:** 4th
- **Wind projects online:** 41 (Projects above 10 MW: 40)
- **Wind capacity under construction:** 1,610 MW
- **Wind capacity in advanced development:** 2,000 MW

Current Wind Generation

During 2016, wind energy provided 25.12% of all in-state electricity production.

- **Equivalent number of homes powered by wind:** 1.8 million

Wind Generation Potential

The DOE Wind Vision Scenario projects that Oklahoma could produce enough wind energy by 2030 to power the equivalent of 1.9 million average American homes.

- **Land based technical wind potential at 80 m hub height:** 390,592 MW
- **Land based technical wind potential at 110 m hub height:** 367,984 MW (Source: NREL)

Environmental Benefits

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

- **2016 annual state water consumption savings**: 4.3 billion gallons
- **2016 equivalent number of water bottles saved**: 32.6 billion
- **2016 annual state carbon dioxide (CO₂) emissions avoided**: 8.3 million metric tons
- **2016 equivalent cars worth of emissions avoided**: 1.8 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.