

Kansas is a national leader in the wind energy industry.

In 2017, Kansas generated 36% of its electricity from wind power, ranking second in the nation for wind energy as a share of total electricity generation and fifth in the nation for installed wind capacity. This wind energy translates into savings for electricity customers. Kansas lies in the Southwest Power Pool (SPP), where wind power saved electricity customers \$1.2 billion in 2013. Wind is also creating economic development for the state, where major wind turbine manufacturer Siemens currenly operates a \$50 million nacelle assembly facility in Hutchinson, Kansas.

Jobs & Economic Benefits

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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.

- 2017 direct and indirect jobs supported: 4,001 to 5,000
- Total capital investment through 2017*: **\$9.4** billion
- Annual land lease payments*: \$15 \$20 million

*Calculations based on national and state averages.

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: **4**



POLICY

Wind Projects

- Installed wind capacity: 5,110 MW
 - » State rank for installed wind capacity: 5th
- Number of wind turbines: 2,795
 - » State rank for number of wind turbines: 5th
- Wind projects online: 35 (Projects above 10 MW: 30)
- Wind capacity under construction: 740 MW
- Wind capacity in advanced development: 774 MW

Wind Generation

During 2017, wind energy provided **36.0%** of all in-state electricity production.

- State rank for share of electricity: 2nd
- Equivalent number of homes powered by wind in 2017: 1,719,000

Wind Generation Potential

The DOE Wind Vision Scenario projects that Kansas could produce enough wind energy by 2030 to power the equivalent of 1.1 million average American homes.

- Land based technical wind potential at 80 m hub height: 884,359 MW
- Land based technical wind potential at 110 m hub height: 485,889 MW (Source: NREL)

Environmental Benefits

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

- 2017 annual state water consumption savings*: 4.1 billion gallons
- 2017 equivalent number of water bottles saved: **31 billion**
- 2017 annual state carbon dioxide (CO₂) emissions avoided: **7.9 million metric tons**
- 2017 equivalent cars' worth of emissions avoided: 1.7 million

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



Renewable Portfolio Goal

Kansas enacted a renewable portfolio standard (RPS) in May 2009, requiring certain utilities to generate or purchase 20 percent of their electricity from renewable resources by 2020. Kansas rapidly outpaced RPS demand and filled the long-term RPS requirement, just as the state legislature converted the standard to a voluntary goal in 2015.

