Kansas is a national leader in the wind energy industry.

Kansas now ranks fourth in the nation for wind energy with over 6,000 MW of operating capacity representing $11.4 billion in capita investment. In 2019, Kansas generated 41% of its electricity from wind power, ranking second in the nation for wind energy as a share of total electricity generation. This wind energy translates into savings for electricity customers. Wind is also creating economic development for the state, where major wind turbine manufacturer Siemens Gamesa currently operates a nacelle assembly facility in Hutchinson, Kansas.

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: 5,001 to 6,000
- Capital investment in wind projects through 2019*: $11.4 billion
- Annual state and local tax payments by wind projects**: $29 million
- Annual land lease payments: $36 million

*Based on state and national averages from LBNL, NREL.
**Based on company 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: 4

American Wind Energy Association | awea.org
Wind Projects as of Q1 2020

- Installed wind capacity: 6,128 MW
  - State rank for installed wind capacity: 4th
- Number of wind turbines: 3,160
  - State rank for number of wind turbines: 5th
- Wind projects online: 39 (Projects larger than 10 MW: 34)
- Wind capacity under construction: 697 MW
- Wind capacity in advanced development: 1,042 MW

Wind Generation

In 2019, wind energy provided 41.40% of all in-state electricity production.

- State rank for share of electricity: 2nd
- Equivalent number of homes powered by wind in 2019: 1,972,600

Wind Energy Potential

- Land-based technical wind potential at 80 m hub height: 506,182 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*: 8.2 million metric tons
  - Equivalent cars' worth of emissions avoided: 1.7 million
- In-state water consumption savings in 2019**: 4.4 billion gallons

*Estimated using Aurora power sector model.
**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.