

WIND ENERGY IN ILLINOIS



Illinois has been successful in attracting investment for wind energy manufacturing and large wind energy projects.

Illinois ranks sixth in the nation for installed wind capacity and became the sixth state to exceed 5,000 MW of operating wind in 2019. Illinois also ranks third in the nation in wind industry employment, with over 8,000 wind jobs in 2019. The state has attracted investment from major wind industry players, including developers RWE Renewables and Invenenergy, as well as tower manufacturer Arcosa and gearbox manufacturer Winergy. The investment of large companies has allowed many smaller manufacturers to get involved in the wind energy supply chain.

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 2019: **8,001 to 9,000**
- Capital investment in wind projects through 2019*: **\$10.9 billion**
- Annual state and local tax payments by wind projects**: **\$49 million**
- Annual land lease payments: **\$37 million**

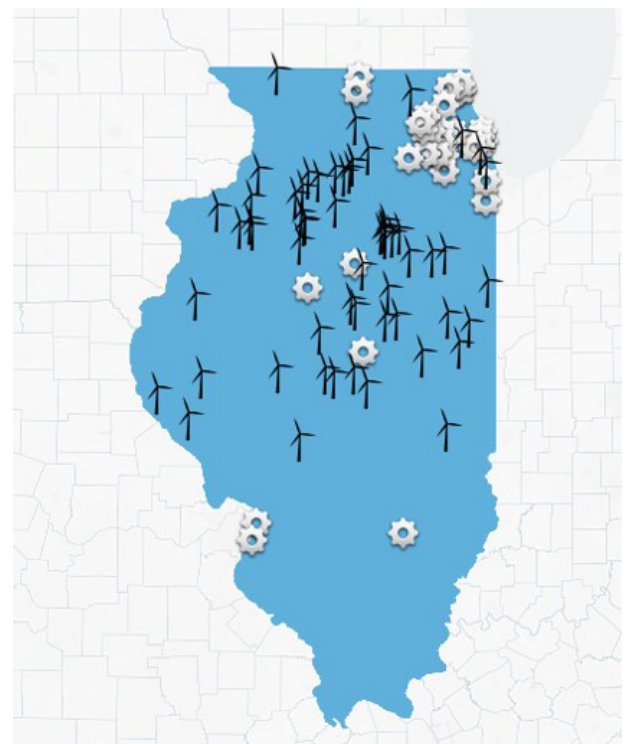
*Based on state and national averages from LBNL, NREL.

**Based on member 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: **35**



 Online Wind Project

 Wind-related Manufacturing Facility

Wind Projects as of Q3 2020

- Installed wind capacity: **5,858 MW**
 - » State rank for installed wind capacity: **6th**
- Number of wind turbines: **3,083**
 - » State rank for number of wind turbines: **6th**
- Wind projects online: **56** (Projects larger than 10 MW: 35)
- Wind capacity under construction: **743 MW**
- Wind capacity in advanced development: **993 MW**

Wind Generation

In 2019, wind energy provided **7.60%** of all in-state electricity production.

- State rank for share of electricity: **17th**
- Equivalent number of homes powered by wind in 2019: **1,268,900**

Wind Energy Potential

- Land-based technical wind potential at 80 m hub height: **191,349 MW**
(Source: AWS Truepower, NREL)
- Offshore net technical wind potential at 100 m hub height: **4,528 MW** (Source: 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*: **7.2 million metric tons**
 - » Equivalent cars' worth of emissions avoided: **1.5 million**
- In-state water consumption savings in 2019**: **3.9 billion gallons**

*Estimated using Aurora power sector model.

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

Renewable Portfolio Standard

The Illinois RPS requires utilities and retail electric suppliers to generate 25% of their electricity sales from renewables by 2025. Illinois made changes to its RPS in December 2016, including adding a requirement for the procurement of 4 million RECs from new wind projects by 2030. The new law also changed the 75% carve-out for wind to 75% for wind and solar combined.

