Pennsylvania is a national leader in wind-related manufacturing.

Pennsylvania is a manufacturing leader for the wind energy industry, with 29 manufacturing facilities producing components for the wind industry and providing high quality jobs. Pennsylvania currently has 25 wind projects online, representing a capital investment of $3.1 billion. Expanding wind power will create even more opportunities for manufacturers and service suppliers down the supply chain.

**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: **2,001 to 3,000**
- Capital investment in wind projects through 2019*:
  - **$3.1 billion**
- Annual state and local tax payments by wind projects:
  - **$2 million**
- Annual land lease payments: **$10.7 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: **32**
Wind Projects as of Q1 2020
- Installed wind capacity: **1,459 MW**
  - State rank for installed wind capacity: **19th**
- Number of wind turbines: **751**
  - State rank for number of wind turbines: **19th**
- Wind projects online: **25** (Projects larger than 10 MW: **23**)
- Wind capacity under construction: **0 MW**
- Wind capacity in advanced development: **68 MW**

Wind Generation
In 2019, wind energy provided **1.50%** of all in-state electricity production.
- State rank for share of electricity: **32nd**
- Equivalent number of homes powered by wind in 2019: **325,600**

Wind Energy Potential
- Land-based technical wind potential at 80 m hub height: **108,946 MW**
  (Source: AWS Truepower, NREL)
- Offshore net technical wind potential at 100 m hub height: **3,578 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*: **3.5 million metric tons**
  - Equivalent cars' worth of emissions avoided: **740,000**
- In-state water consumption savings in 2019**: **1.9 billion gallons**
*Estimated using Aurora power sector model.
**Based on national average water consumption factors for coal and gas plants.

Renewable Portfolio Standard
Pennsylvania passed an Alternative Energy Portfolio Standard (AEPS) in 2004, requiring electricity suppliers to supply 18 percent of their sales from alternative energy sources by 2021. Wind energy has historically been the renewable resource chosen to meet renewable standards requirements, fulfilling 61% of Pennsylvania's requirement in 2014.