

WIND ENERGY IN MARYLAND



Wind energy means economic development for Maryland.

The first utility scale wind turbine was installed in Maryland in 2010 and there are now six wind projects across the state. In 2017, Maryland completed the first large-scale solicitation of offshore wind in the U.S., awarding offshore renewable energy credits (ORECs) to two projects totaling 389 MW in development off the coasts of Maryland and Delaware. Expanding onshore and offshore wind energy in the state will create even more opportunities for manufacturers and service suppliers to enter the wind supply chain, creating high quality jobs.

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.

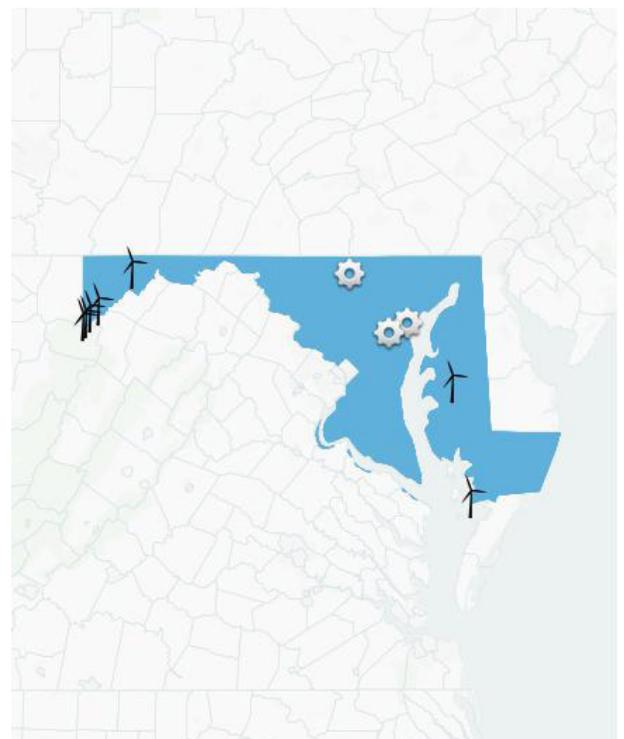
- Direct wind industry jobs in 2018: <500
- Capital investment in wind projects through 2018*: \$408 million
- Annual state and local tax payments by wind projects: \$2.5 million
- Annual land lease payments*: \$500k - \$1 million

*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: 3



Online Wind Project Wind-related Manufacturing Facility

Wind Projects as of 3Q 2019

- Installed wind capacity: **191 MW**
 - » State rank for installed wind capacity: **31st**
- Number of wind turbines: **80**
 - » State rank for number of wind turbines: **33rd**
- Wind projects online: **6** (Projects larger than 10 MW: 4)
- Wind capacity under construction: **0 MW**
- Wind capacity in advanced development: **269 MW**

Wind Generation

In 2018, wind energy provided **1.2%** of all in-state electricity production.

- State rank for share of electricity: **33rd**
- Equivalent number of homes powered by wind in 2018: **52,900**

Wind Energy Potential

- Land-based technical wind potential at 80 m hub height: **7,283 MW**
(Source: AWS Truepower, NREL)
- Offshore net technical wind potential at 100 m hub height: **26,529 MW** (Source: NREL)

Environmental Benefits

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

- 2018 annual state water consumption savings*: **536 million gallons**
- 2018 equivalent number of water bottles saved: **4.1 billion**
- 2018 annual state carbon dioxide (CO₂) emissions avoided: **1.0 million metric tons**
- 2018 equivalent cars' worth of emissions avoided: **221,000**

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

Renewable Portfolio Standard

Maryland first enacted a renewable portfolio standard (RPS) in 2004 and most recently increased the standard in May 2019. The RPS requires the state's utilities to derive 50% of their electricity sales from renewable resources by 2030, including 1,200 MW of offshore wind.

