WIND ENERGY IN MAINE

Wind energy means economic development for Maine.

Maine has strong wind energy resources that can be harnessed to help the state meet its renewable energy goals while creating economic development. Jeremy Payne, executive director of the Maine Renewable Energy Association, recently explained to the Portland Press Herald why wind power is the best bet for the state's renewable energy future: "Maine wind farms generated more than 880,000 megawatt-hours, all from the power of the wind... A recent poll showed that support for wind energy is shared by an overwhelming 87 percent of Mainers, who said that it is the kind of clean, emission-free renewable energy that our state should be prioritizing."

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.

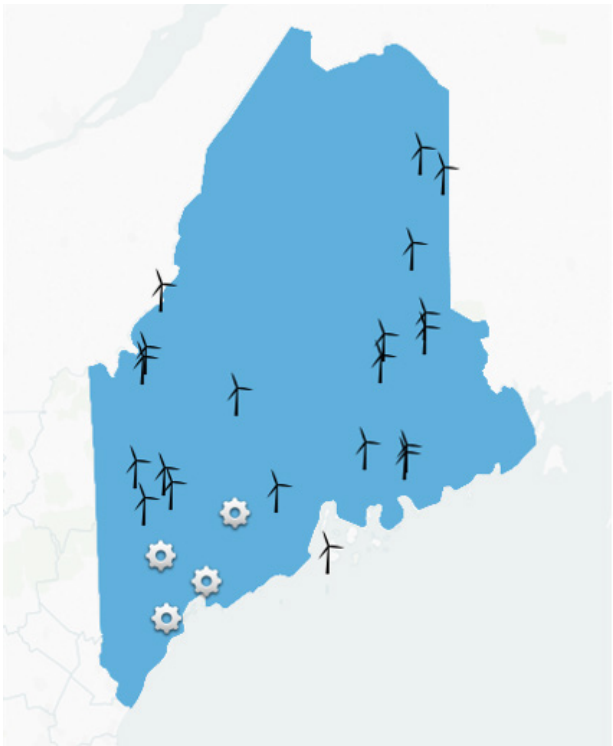
- Direct wind industry jobs in 2018: **501 to 1,000**
- Capital investment in wind projects through 2018*: **$1.8 billion**
- Annual state and local tax payments by wind projects: **$16.5 million**
- Annual land lease payments*: **$1 - $5 million**

*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: **5**



Online Wind Project

Wind-related Manufacturing Facility

STATE WIND FACTS

Wind Projects as of 2Q 2019

- Installed wind capacity: **923 MW**
  - » State rank for installed wind capacity: **22nd**
- Number of wind turbines: **386**
  - » State rank for number of wind turbines: **24th**
- Wind projects online: **18** (Projects larger than 10 MW: 13)
- Wind capacity under construction: **0 MW**
- Wind capacity in advanced development: **0 MW**

Wind Generation

In 2018, wind energy provided **21.0%** of all in-state electricity production.

- State rank for share of electricity: **6th**
- Equivalent number of homes powered by wind in 2018: **231,900**

Wind Energy Potential

- Land-based technical wind potential at 80 m hub height: **69,797 MW**
  (Source: AWS Truepower, NREL)
- Offshore net technical wind potential at 100 m hub height: **94,498 MW** (Source: NREL)

Environmental Benefits

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

- 2018 annual state water consumption savings*: **68 million gallons**
- 2018 equivalent number of water bottles saved: **441 million**
- 2018 annual state carbon dioxide (CO_2) emissions avoided: **142,000 metric tons**
- 2018 equivalent cars' worth of emissions avoided: **30,000**

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

POLICY

Renewable Portfolio Standard

Maine increased its RPS in June 2019, requiring electricity providers to supply 80% of their total electric sales from renewable resources by 2030, including a 50% target for new renewables. The state also established a goal of 100% renewable energy by 2050.

AWEA AMERICAN WIND ENERGY ASSOCIATION