

WIND ENERGY IN ALASKA



Wind energy means economic development and independence for the communities of Alaska.

Alaska has increased its wind power capacity through investments in both utility-scale and distributed wind generation. Projects around the state provide clean, renewable electricity to rural or remote communities; many of these villages are beyond power grids and roads, importing diesel fuel by barge or airplane. Wind power is allowing them to decrease their dependence on costly diesel fuel. In 2010, the state of Alaska set a non-binding renewable energy goal to generate 50% of the state's electricity from renewable energy by 2025.

B 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*: \$132 million
- Annual state and local tax payments by wind projects: <\$1 million
- Annual land lease payments*: <\$500k

*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: 0



Online Wind Project



Wind-related Manufacturing Facility

Wind Projects as of 4Q 2019

- Installed wind capacity: **64 MW**
 - » State rank for installed wind capacity: **37th**
- Number of wind turbines: **104**
 - » State rank for number of wind turbines: **31st**
- Wind projects online: **21** (Projects larger than 10 MW: 2)
- Wind capacity under construction: **0 MW**
- Wind capacity in advanced development: **0 MW**

Wind Generation

In 2018, wind energy provided **2.3%** of all in-state electricity production.

- State rank for share of electricity: **28th**
- Equivalent number of homes powered by wind in 2018: **14,100**

Wind Energy Potential

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

Environmental Benefits

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

- 2018 annual state water consumption savings*: **NA gallons**
- 2018 equivalent number of water bottles saved: **NA**
- 2018 annual state carbon dioxide (CO₂) emissions avoided: **119,000 metric tons**
- 2018 equivalent cars' worth of emissions avoided: **25,000**

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

Alaska

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