

# WIND ENERGY IN UTAH



## Wind energy means economic development for Utah.

Wind power can help Utah meet its renewable energy goals while creating economic growth. Utah's first large scale wind turbines were installed in 2000 at the Camp Williams military base. The state currently has 5 wind projects online, with a total capital investment of \$871 million. Utah's proximity to important wind energy areas, combined with manufacturing expertise, could make Utah a major manufacturing player for the wind industry.

## 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\*: \$871 million
- Annual state and local tax payments by wind projects: \$2 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: 1



Online Wind Project



Wind-related Manufacturing Facility

## Wind Projects as of 3Q 2019

- Installed wind capacity: **391 MW**
  - » State rank for installed wind capacity: **27th**
- Number of wind turbines: **205**
  - » State rank for number of wind turbines: **27th**
- Wind projects online: **5** (Projects larger than 10 MW: **3**)
- Wind capacity under construction: **0 MW**
- Wind capacity in advanced development: **0 MW**

## Wind Generation

In 2018, wind energy provided **2.1%** of all in-state electricity production.

- State rank for share of electricity: **30th**
- Equivalent number of homes powered by wind in 2018: **82,200**

## Wind Energy Potential

- Land-based technical wind potential at 80 m hub height: **277,746 MW**  
(Source: AWS Truepower, NREL)
- Offshore net technical wind potential at 100 m hub height: **NA MW** (Source: NREL)

## Environmental Benefits

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

- 2018 annual state water consumption savings\*: **2.1 billion gallons**
- 2018 equivalent number of water bottles saved: **16 billion**
- 2018 annual state carbon dioxide (CO<sub>2</sub>) emissions avoided: **3.7 million metric tons**
- 2018 equivalent cars' worth of emissions avoided: **777,000**

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

## Renewable Portfolio Goal

Utah enacted a renewable portfolio goal (RPG) in 2008 for utilities to use renewable energy for 20 percent of their 2025 adjusted retail electric sales. Wind energy has historically been the renewable resource chosen to meet renewable energy targets.

