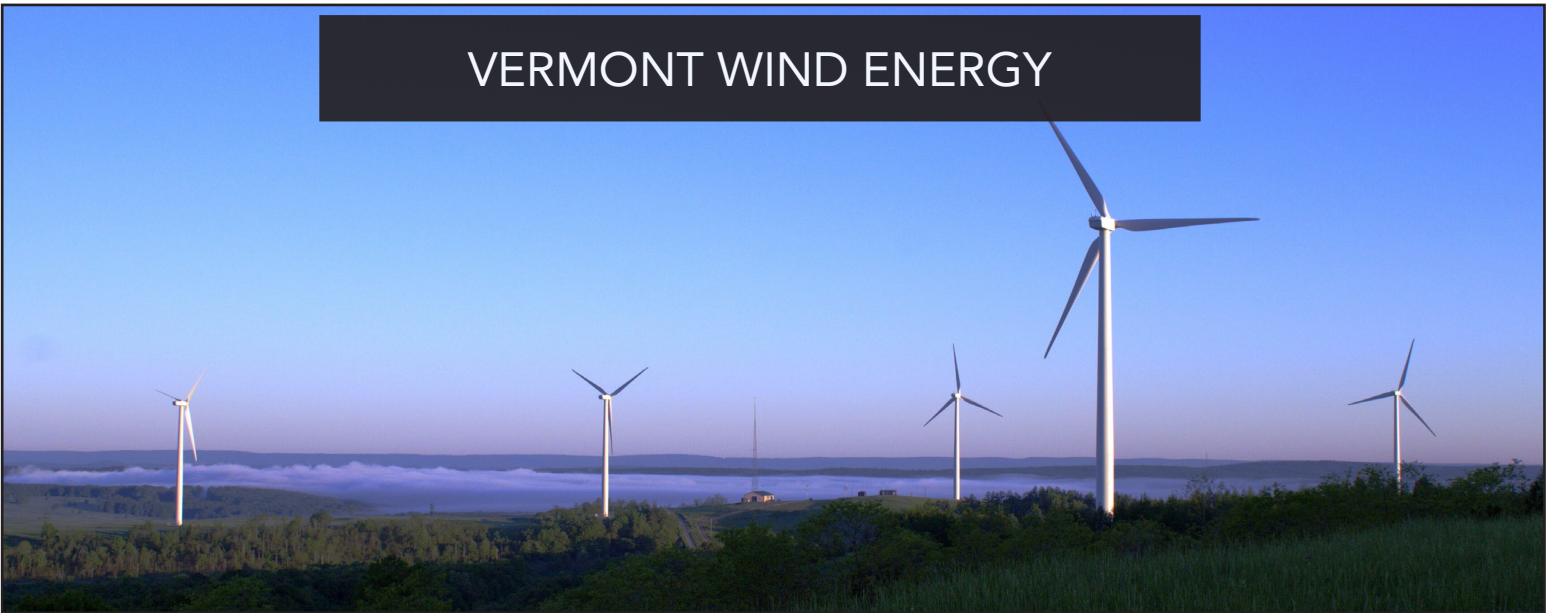
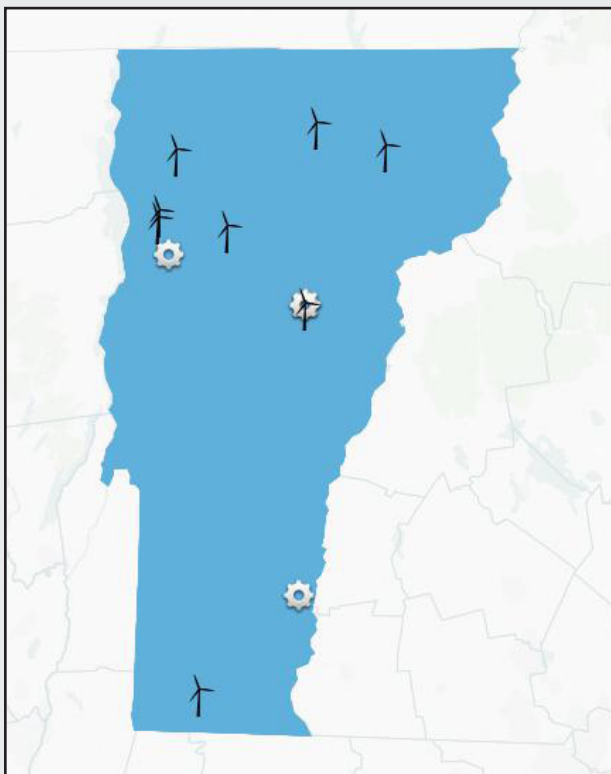


# VERMONT WIND ENERGY



## Wind energy means economic development for Vermont.

Vermont currently generates 15% of its electricity from wind power, ranking eighth in the nation for wind energy as a share of total electricity generation. According to a Vermont Public Interest Research and Education study of future energy scenarios for the state, wind could provide 25% of Vermont's energy by 2032 with wind farms on just 4 percent of the state's windy ridgelines. Expanding the wind industry would translate to both environmental and economic benefits for the state, creating opportunity for manufacturers and service suppliers to enter the wind supply chain.



 Online Wind Project     Manufacturing Facility

Note: Calculations based on national and state averages.

## BENEFITS Jobs & Economic

An investment in wind power is an investment in jobs, including jobs in operations and maintenance, construction, manufacturing and many support sectors. In addition, wind projects produce lease payments for landowners and increase the tax base of communities.

- 2015 direct and indirect jobs supported: 101 to 500
- Total capital investment: \$250 million
- Annual land lease payments: \$100,000 - 500,000

## Wind-Related Manufacturing

The United States has over 500 manufacturing facilities producing products for the wind industry that range from blade, tower and turbine nacelle assembly facilities to raw component suppliers, including fiberglass and steel.

- Number of active manufacturing facilities in the state: 4

## Wind Projects

- **Installed wind capacity:** 119 MW
- **State rank for installed wind capacity:** 33rd
- **Number of wind turbines:** 56
- **State rank for number of wind turbines:** 35th
- **Wind projects online:** 8
- **Wind capacity under construction:** 30 MW
- **Wind capacity in advanced development:** 7 MW

## Current Wind Generation

For the 12 month period ending October 2016, wind energy provided 15.26% of all in-state electricity production.

- **Equivalent number of homes powered by wind:** 30,000

## Wind Generation Potential

The DOE Wind Vision Scenario projects that Vermont could produce enough wind energy by 2030 to power the equivalent of 155,000 average American homes.

- **Land based technical wind potential at 80 m hub height:** 1,292 MW
- **Land based technical wind potential at 110 m hub height:** 17,236 MW (Source: NREL)

## Environmental Benefits

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

- **2015 annual state water consumption savings\*:** NA gallons
- **2015 equivalent number of water bottles saved:** NA
- **2015 annual state carbon dioxide (CO<sub>2</sub>) emissions avoided:** 20,000 metric tons
- **2015 equivalent cars worth of emissions avoided:** 4,000

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



## Renewable Portfolio Standard

In 2015, Vermont created a mandatory Renewable Energy Standard (RES), replacing its existing renewable goal. The RES requires 75% of all utility retail sales to come from renewable resources by 2032, the second highest goal in the nation, with an interim goal of 55% renewables by 2017.