

# NEBRASKA WIND ENERGY



## Nebraska is a national leader in wind resource potential.

Nebraska has a rich wind resource with the technical ability to provide over 900,000 megawatts (MW) of wind power every year. This potential, combined with manufacturing expertise, could make the state a powerhouse for the wind industry. This wind energy also translates into savings for electricity customers. The state lies in the Southwest Power Pool (SPP), where wind power saved electricity customers \$1.2 billion in 2013.



 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.

- 2014 direct and indirect jobs supported: 1,001 to 2,000
- Total capital investment: \$1.5 billion
- Annual land lease payments: \$2.4 million

## 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: 1

## Wind Projects

- **Installed wind capacity:** 890 MW
- **State rank for installed wind capacity:** 20th
- **Number of wind turbines:** 520
- **State rank for number of wind turbines:** 20th
- **Wind projects online:** 16
- **Wind capacity under construction:** 436 MW

## Current Wind Generation

In 2014, wind energy provided 6.91% of all in-state electricity production.

- **Equivalent number of homes powered by wind:** 251,000

## Wind Generation Potential

The DOE Wind Vision Scenario projects that Nebraska could produce enough wind energy by 2030 to power the equivalent of 511,000 average American homes.

- **Land based technical wind potential at 80 m hub height:** 881,369 MW
- **Land based technical wind potential at 110 m hub height:** 471,632 MW (Source: NREL)

## Environmental Benefits

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

- **Annual state water consumption savings:** 1.9 billion gallons
- **Equivalent number of water bottles saved:** 14.7 billion
- **Annual state carbon dioxide (CO<sub>2</sub>) emissions avoided:** 3.2 million metric tons
- **Equivalent cars worth of emissions avoided:** 690,000



## Nebraska

The state of Nebraska does not currently have a renewable portfolio standard (RPS) or goal set in place to require utilities to generate a certain percentage of electricity from renewable sources.