

MISSOURI WIND ENERGY



Wind energy means economic development for Missouri.

Missouri's proximity to important wind energy areas, combined with manufacturing expertise, could make Missouri a manufacturing powerhouse for the wind industry. Many companies in Missouri have already entered the wind energy supply chain, and expanding wind power will create even more opportunities for manufacturers and service suppliers. For example, leading manufacturer ABB, Inc. operates power transmission manufacturing facilities in St. Louis and Jefferson City.



 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: 501 to 1,000
- Total capital investment: \$960 million
- Annual land lease payments: \$1-5 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: 11

Wind Projects

- **Installed wind capacity:** 459 MW
- **State rank for installed wind capacity:** 25th
- **Number of wind turbines:** 252
- **State rank for number of wind turbines:** 26th
- **Wind projects online:** 6
- **Wind capacity under construction:** 500 MW
- **Wind capacity in advanced development:** 0 MW

Current Wind Generation

For the 12 month period ending July 2016, wind energy provided 1.40% of all in-state electricity production.

- **Equivalent number of homes powered by wind:** 95,000

Wind Generation Potential

The DOE Wind Vision Scenario projects that Missouri could produce enough wind energy by 2030 to power the equivalent of 1.5 million average American homes.

- **Land based technical wind potential at 80 m hub height:** 58,020 MW
- **Land based technical wind potential at 110 m hub height:** 340,898 MW (Source: NREL)

Environmental Benefits

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

- **2015 annual state water consumption savings*:** 6.6 billion gallons
- **2015 equivalent number of water bottles saved:** 49.9 billion
- **2015 annual state carbon dioxide (CO₂) emissions avoided:** 10.4 million metric tons
- **2015 equivalent cars worth of emissions avoided:** 2.2 million

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



Renewable Portfolio Standard

A 2008 ballot initiative replaced Missouri's existing voluntary targets with a mandatory renewable portfolio standard (RPS) that requires investor owned utilities to supply 15% of their electricity sales with renewable resources by 2021. Wind energy has historically been the renewable resource of choice to meet renewable standards requirements in Missouri.