

Washington was an early leader in the wind industry.

Washington brought its first utility-scale project online in 2001 and has continued developing resources along the Columbia Gorge since that time, currently ranking ninth in the nation for installed wind capacity. Developing the state's wind resource has created economic development for the state. There are at least ten manufacturing facilities in Washington producing components for the wind industry. Entering the wind energy supply chain translates into high quality jobs across the state, such as those created by gearbox manufacturer Gear Works in Seattle.



Online Wind Project



Note: Calculations based on national and state averages.

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.

- 2016 direct and indirect jobs supported:
 1,001 to 2,000
- Total capital investment through 2016: \$6.1
- Annual land lease payments: \$5-10 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: 10

Wind Projects

- Installed wind capacity: 3,075 MW
- State rank for installed wind capacity: 9th
- Number of wind turbines: 1,725
- State rank for number of wind turbines: 10th
- Wind projects online: 20 (Projects above 10 MW: 18)
- Wind capacity under construction: 0 MW
- Wind capacity in advanced development: 0 MW

Current Wind Generation

During 2016, wind energy provided 7.13% of all in-state electricity production.

Equivalent number of homes powered by wind: 743,000

Wind Generation Potential

The DOE Wind Vision Scenario projects that Washington could produce enough wind energy by 2030 to power the equivalent of 927,000 average American homes.

- Land based technical wind potential at 80 m hub height: 6,386 MW
- Land based technical wind potential at 110 m hub height: 67,551 MW (Source: NREL)

Environmental Benefits

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

- 2016 annual state water consumption savings*: 1.4 billion gallons
- 2016 equivalent number of water bottles saved: 10.2 billion
- 2016 annual state carbon dioxide (CO₂) emissions avoided: 2.8 million metric tons
- 2016 equivalent cars worth of emissions avoided: 601,000

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



Renewable Portfolio Standard

Washington passed a renewable energy standard (RES) through ballot initiative in 2006. The RES requires certain utilities to obtain 15 percent of their 2020 electricity sales from renewables and to invest in energy efficiency. Wind energy has historically been the renewable resource of choice to meet RPS requirements, fulfilling 71% of the state's requirement in 2015.

