



Delivering parts for assembling a wind turbine in Idaho.



Wind turbines can be seen in various locations across southern Idaho.

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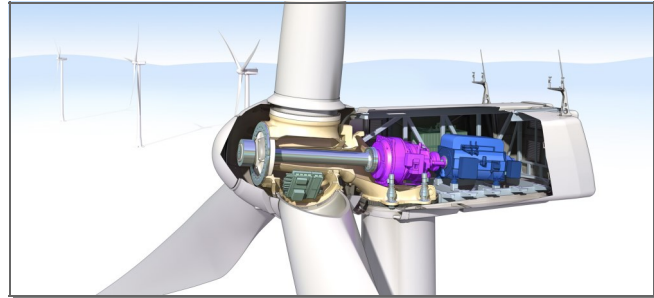


Energy Facts



Idaho — WIND ENERGY

- Wind energy can be converted into electricity using a wind turbine like the one shown below.



Schematic courtesy of Alstom.

- Wind energy is a renewable energy resource that does not emit air pollutants or carbon dioxide.
- Wind energy is a maturing technology. Commercial wind turbines have grown from 100 foot-tall turbines with capacities well below 100 kilowatts (kW) in the 1980's to today's massive multi-megawatt machines sitting atop 300 foot-tall towers.
- State-of-the-art technologies exist in every turbine classification, from small homeowner units up to massive 5 megawatts (MW) off-shore units.

Wind Energy in Idaho

- Idaho has an installed capacity of 973 MW of wind energy generation capacity as of 2013.¹
- Idaho's wind generation increased by nearly 35% in 2013, providing 16% of net electricity generation.²
- The 167.7 million megawatt-hours (MWh) of wind energy produced in the U.S. in 2013 reduced CO₂ emissions by 126.8 million short tons, the equivalent of reducing power sector emissions by more than 5 percent or taking 20 million cars off the road.³
- Of the 126.8 million short tons of reduced CO₂ emissions, Idaho has reduced CO₂ emissions by 303,000 tons.³
- Wind power increased its share of U.S. total electricity generation in 2013 from 3.5% to 4.1%; Idaho was one of the states with more than twice the national share of 4.1% wind power.⁴

¹<http://awea.rd.net/Resources/state.aspx?ItemNumber=5227>

²<http://www.eia.gov/state/?sid=ID>

³AWEA analysis using AVERT

⁴<http://www.eia.gov/todayinenergy/detail.cfm?id=15851>

Operating Commercial-scale Wind Farms in Idaho

Operating Commercial-scale wind farms in Idaho as of 2014 are listed below.⁵

Wind Energy-Integration Challenges

- The electrical transmission paths near potential wind energy resource areas are mostly or fully subscribed, limiting the ability to transport significant quantities of additional wind energy.
- Wind energy is an intermittent variable resource.
- Improvements in storage technology will make wind energy easier to integrate into the electrical grid.



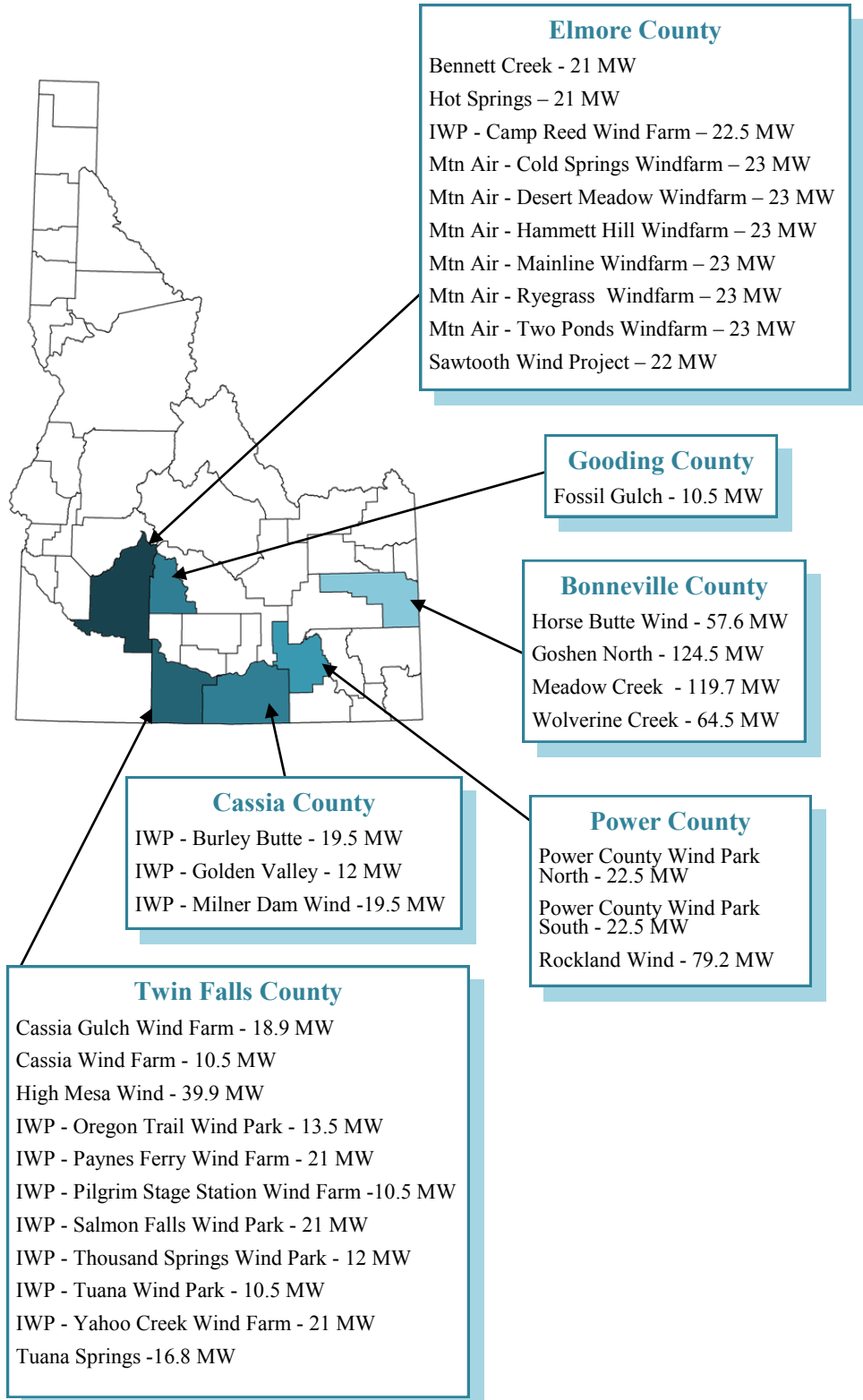
Wind turbine and solar panel installation at the COSSA school facility in Wilder, Idaho.



Horse Butte Wind Project site 15 miles east of Idaho Falls near Kepp's Crossing.



Installing additional wind turbines in Idaho.



Find the ISEA Task Force Reports:
www.energy.idaho.gov/energyalliance/taskforce.htm

⁵Renewable Northwest Project www.rnp.org