



## Frequently Asked Questions

### What benefits does wind energy bring to Nebraskans?

An investment in wind power is an investment in jobs. The wind industry provides opportunities in operations, maintenance, construction, manufacturing, and many other support sectors. The wind industry supports a total of over 2,000 direct and indirect jobs in Nebraska. Additionally, wind projects pay lease payments to landowners and increase the tax base of local communities.

### How does wind energy affect the cost of electricity?

Wind energy helps reduce the cost of electricity. Nebraska lies in the Southwest Power Pool (SPP), where wind power saved its electricity customers \$1.2 billion in 2013.

### Is wind power cost competitive with other forms of energy?

Over the last seven years, the cost of wind energy has decreased 66%, making it highly competitive with other forms of energy. In certain regions of the country, wind's unsubsidized costs are competitive with traditional forms of energy. Prices ranged from \$30/MWh to \$60/MWh in 2017, with pricing lowest in the interior region of the country.

The largest cost in producing wind energy is that of the wind turbine, which can make up to 70% of the entire cost of an onshore wind project. The cost of installation and construction makes up the remaining capital costs. In recent years, the capital cost of wind projects has gone down significantly. Additionally, because wind power has zero fuel costs, utilities and corporate customers can sign long-term contracts with known electricity costs for 20-30 years. This creates stability that is good for consumers.

### What kind of government subsidies does wind energy receive?

All forms of energy, both renewable and nonrenewable, receive some sort of subsidy from the government. Wind energy receives a Production Tax Credit (PTC), a pro-growth tax credit that aims to keep wind energy attractive to investors. The PTC is set to phase out with tax credits ending after 2019. In Nebraska, the Nebraska Advantage Act provides a sales tax exemption for the purchase of turbines, towers and other wind farm components.

### How much wind energy does Nebraska produce?

Nebraska currently has 22 wind energy projects up and running with a total of 778 wind turbines. The state has a total of 1,415MW of installed wind capacity which is the equivalent of powering 486,700 homes. Wind power makes up 14.1% of in-state energy generation.

### Do wind turbines harm wildlife?

No form of energy generation is free from impact. However, studies have shown wind energy's impacts to be the lowest, as it emits no air or water pollution, requires no mining or drilling for fuel, uses no water in the generation of electricity, and creates no hazardous or radioactive waste requiring permanent storage. Overall, wind causes less than 0.01 percent of all human-related bird deaths.

### What happens when the wind doesn't blow?

No power plant operates 24/7. The electric grid can move electricity where it's needed, when it's needed. If the wind isn't blowing in one place, it's going to be blowing somewhere else on the grid. Grid operators balance power supply within a region to keep the lights on, moving electricity from different parts of the grid to meet demand.

Think of this analogy: Suppose you drive to work, five days a week, and you decide to buy a bicycle and bike to work when the weather permits, which turns out to be 3-4 days a week much of the year. But you still need a car because some days the weather is bad. Does your bike have no value? Of course not. You are becoming healthier, saving money, and generating less air pollution.

Yes, traditional power plants are still needed, but we can run them less and reap the benefits brought by clean energy if we increase wind power. Check out this video from The Energy Foundation for more information.

