

## ***Nature facts (Wind energy)***

### ***1. Are there any energy production methods that do not require water?***

*Wind energy is an energy production method where there is no need for water. Huge amounts of water are utilized for cooling by [coal](#), [nuclear](#), and [natural gas](#) plants. During electricity generation, the wind's kinetic energy is transformed into mechanical energy, which then becomes electrical energy. The [wind energy](#) method is environmentally beneficial.*

### ***2. What do you know about wind farms?***

*In a wind farm, there are many wind turbines that are located in the same area. The number of [wind turbines](#) varies. For example, there are about 100 wind turbines located in the same area. These turbines are interconnected by underground cables that supply electricity to a transformer substation.*

### ***3. The biggest wind farm in the world is located in which country?***

*Located in China, the [Gansu Wind Farm](#) is the largest wind farm in the world. With a capacity of 20 GW and over 7,000 turbines, the Gansu wind farm is the world's largest wind power installation.*

### ***4. Can excessive wind speed damage wind turbines?***

*Yes, excessive wind speed can damage the wind turbine. Wind turbines can tolerate up to the speed of 90 km/hr wind. When wind speed increases above 90 km/hr, turbines are shut down to prevent damage.*

### ***5. When was the first modern turbine built?***

*The first modern wind turbine was built in 1941. It was the [Smith-Putnam wind turbine](#) that was in [Vermont](#).*

## ***References***

- [https://en.wikipedia.org/wiki/Electricity\\_generation](https://en.wikipedia.org/wiki/Electricity_generation)
- [https://www.wikiwand.com/en/articles/Gansu\\_Wind\\_Farm](https://www.wikiwand.com/en/articles/Gansu_Wind_Farm)
- [https://en.wikipedia.org/wiki/Wind\\_power](https://en.wikipedia.org/wiki/Wind_power)