

Measure Your Wind

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The most important thing you can do first is measure your wind with one of many reasonably priced and commercially available kits.

If the average wind speed is 6 meters per second or above, you almost always have a great return on investment. 5 meters per second usually means a good return on investment.

Look at some free online resources to get a feeling as to whether or not you are in a high wind area. There is a caution that comes with all these resources. Wind can be very specific to a specific location and height. Many of these resources don't tell you exactly where they were measured and at what height. They are useful as a starting approximation.

International information: Weather Underground: <https://www.wunderground.com/>

USA.com: www.usa.com

Enter your location, then click on Others, and scroll down to the bottom of the page for the wind graph.

International information: Meteoblue: <https://www.meteoblue.com> To take full advantage of this site, click on the left side bar where it says Archive Climate and then under it Weather Archive. It takes you to a page where you can get wind speed measurements or projections over the course of a year.

US Department of Energy: <https://windexchange.energy.gov/>

This site has useful information in general and has links to wind maps of each state.

Many countries have their own meteorological services and provide data to the public.

You can take that approximation and generalize by asking yourself questions: Are those websites generally accurate about what I feel the wind is? Is my location open on all sides so the wind can come through easily? Is my location in a geographical wind tunnel that accelerates the wind and makes it higher than in my area?

Ultimately, the best solution is to invest a small amount of money and get data from a weather station. Look for one that produces a spreadsheet so that the data can be analyzed. The more often the weather station can take readings, such as every 10 seconds instead of every minute, the better. We do not make these weather stations. We simply recommend any of the reputable models that are in the price range of \$100-200 each. If you are building a wind farm involving megawatts, then you should approach one of the commercial testing services.