

Wind Geography

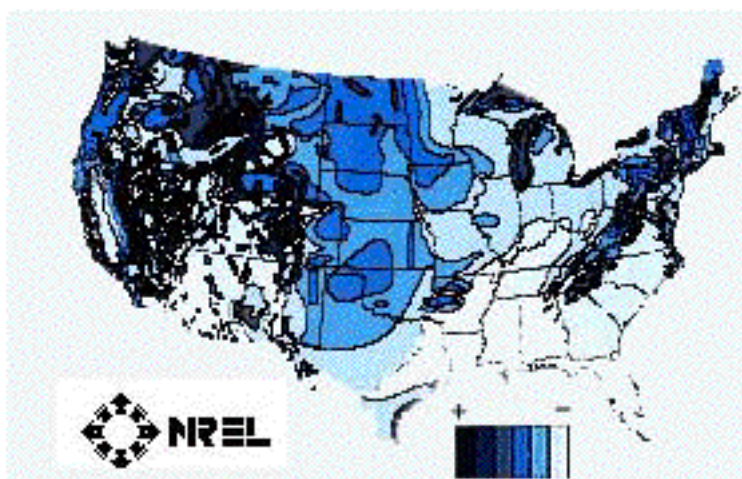
The location of wind power stations are strongly linked to geography. Anywhere that wind farms can survive are areas that winds are strong and move at intense speeds. Some places that wind is particularly powerful are mountaintops, tornado or hurricane alleys, and offshore water areas.

The main parameter that establishes a location as suitable for wind power, is the elevation, in addition to geography. In the United States, for example, the greatest speeds available for wind power farms to harness are found around locations of high elevation. The Rocky mountains in the western part of the United States serves as a principle location for great wind power production. In the eastern part of the United States, the Appalachian mountains are the prime place for wind power turbines because of the great strength of the winds there.

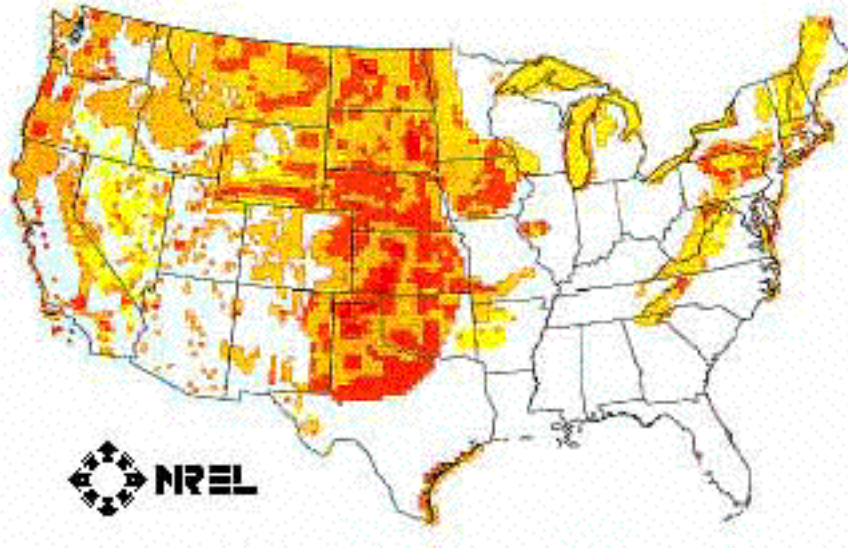
Why aren't the all of the world's energy problems solved by placing a few wind power turbine farms in the middle of an area of high tornado, tsunami, or hurricane activity? Obviously, the reason is because the wind power stations just fall down. A better design that could produce power for these conditions would be a hybrid design that could handle both the wind in large storms, and the water motion. For more information on this design, see the [turbines comparison](#) page.

In addition to mountaintops, offshore beaches are excellent locations for collecting the power of the wind. Wind power blades cause problems for birds at high elevations, and also prove to be complications for boats that travel in the ocean, or fish close to the beach. For the safety of both fishers and birds, close offshore wind power stations are not realistic without protective measures.

The following maps show the locations of high wind power opportunity in the United States. Both maps show high great opportunity on some of the coastal regions, and on top of the mountains. Examine in particular the coast off of Texas (the south tip of the map), the Outer Banks, and the West Coast.



United States Average Wind Power



Certainty of Wind Power