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Title: How does the wind move the wind turbine

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Wind turbines use blades to collect the wind's kinetic energy. Wind flows over the blades creating lift (similar to the effect on airplane wings), which causes the blades to turn.

When air moves faster over one side of the blade than the other, it produces lift, just as in aircraft wings. This lift, acting at an angle relative to the rotor's axis, generates a torque that spins the ...

The workings of a wind turbine are much different, except that instead of using a fossil fuel heat to boil water and generate steam, the wind is used to directly spin the turbine blades to get the generator ...

Here again is a link to a video explaining the "anatomy" of a wind energy converter - let's watch it, starting from the 4 th minute: the reasons why not all energy carried by the "upstream" wind ...

When wind flows across the blade, the air pressure on one side of the blade decreases. The difference in air pressure across the two sides of the blade creates both lift and drag. The force of the lift is ...

Wind turbines operate on a simple principle: the wind turns two or three propeller-like blades around a rotor, which is connected to the main shaft. This causes the axis to rotate, which is ...

Blowing air passes around both sides of the blade. The shape of the blade causes the air pressure to be uneven, higher on one side of the blade and lower on the other, and that's what ...

Wind turbines work on a simple principle: instead of using electricity to make wind--like a fan-- wind turbines use wind to make electricity. Wind turns the propeller-like blades of a turbine around a rotor, ...

When the wind blows across the blade, the air pressure on one side drops. Lift and drag are created by the difference in air pressure between the two sides of the blade. The lift force is ...

How does the wind move the wind turbine

This paper discusses the wind and how the parts of a wind turbine--blades, rotor, gears, generator, and electronics--operate to capture wind energy and turn it into electricity. Focus is given ...

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