

Disadvantages of Wind Turbines

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Wind Energy and Environmental Debate

This is a con paper, and it addresses the issues that wind turbines bring to the community. While comparing consistency, solar energy and wind energy have many aspects in common. Even though wind power meets the requirements to be a renewable energy resource, fluctuation of speed of wind can be seen each day. This turned out to be a situation of huge disappointment for the developers of wind turbines that spent every ounce of energy and every penny in these projects just to end up with inconsistent wind patterns.

Noise and Residential Impact

According to some researchers, noise is a major factor of annoyance for the inhabitants living in the surroundings of the wind houses. At some point during the night, the noise is extremely high. The concerned authorities in the UK and other European countries have issued guidelines regarding wind powerhouses (Erickson, Johnson and Young, 2005). According to some complainants, the nearby passing traffic is another factor in the enhanced noise during the night. Way back in the year 2009, a hospital doctor in New York reported that lack of sleep, headache, dizziness, anxiety, memory loss, low energy, bad temper, and nausea are all linked with the noise emission from wind power. All these symptoms have been termed as “wind turbine disorder” (Erickson, Johnson and Young, 2005). The doctor tested ten different families residing in the surroundings of a wind turbine to draw conclusions.

Installation and Maintenance Costs

Many efforts were made to lower the installing turbines' cost; however, the overall expense and cost remain high throughout. As a first step, before installing a wind turbine, a rigorous survey is conducted to evaluate better the location in which the wind speed is moving. Accordingly, if that area is considered as an ideal place, then manufacturing of wind turbines is made, and at last, it is transported to that location and fixed on some strong foundation (Centre for Sustainable Energy, 2011). The whole procedure increases the cost of setting up the wind turbine. The cost became higher and more pronounced when it came to discussing wind turbines in the offshore area. The reason behind this is that installing wind turbines offshore is a more daunting task than installing them onshore. Some firms go beyond the extent of bespoke commissioning ships with the capability to carry and install wind turbines at sea.

Landscape and Visual Effects

Even though wind turbines are manufactured with eye-catching designs, they negatively affect the landscape's beauty. The area turns out to be unattractive if too many wind turbines are installed. More alarm bells will be sounded by the local community, and this thing will worsen the conflict. Although most individuals think that these wind turbines look wonderful, the majority of people disagree with this statement.

Wind Turbines and Bird Mortality

Moreover, wind turbines are one of the leading causes of bird fatalities across the globe. For the local species of birds, particularly, these wind turbines are a disadvantage. Several cases have been reported in such areas where the death of birds due to collision with blades of turbine occurred. This results in wiping out the population of some bird species. On the other hand, as these turbines are set upon a strong foundation that has to dig deep, so they also have negative consequences for the habitants living underground (Johnson, 2014). So, to reduce the death of birds, wind turbines without blades are now inflow into the market. For manufacturers of turbines, this proved to be a game changer.

Comparative Wildlife Impact

According to a survey, the number of bird fatalities due to wind turbines is high as compared to the physical structures, including skyscrapers, buildings, power lines, power pylons, etc., erected by humans. In Spain, the deaths caused by wind turbines installed at the mountain range of Campo de Gibraltar were high. Across the UK and Europe continent, around 1,500 deaths were caused during April 2009 (Jones, Cooper-Bohannon, Barlow and Parsons, 2009). The victim birds sometimes belong to a rare and vulnerable species. Griffon vulture, a vulnerable species, often becomes a victim of raptors. The birds across Europe migrate to other areas, but the available data on bird migration is not sufficient (Jones et al., 2009).

Noise Pollution and Health Concerns

The most hated factors that lead to a disadvantage for turbines is the production of noise. One can perceive the sound originating from one turbine from an outlying distance. This noise becomes unbearable when coming out from more than one turbine. The lives of many homeowners changed drastically because of this turbine noise pollution. Although there is a rule to install wind turbines far away from the living community, no one cares. This is the reason behind the public objection to the installation of wind turbines in local areas. The beauty of a place is destroyed, i.e., visual pollution, another reason why people don't prefer to install wind turbines in a backyard (Siegel, 2012).

Geographic and Reliability Limitations

The coastal area is most suitable for installing wind turbines, and they receive the wind for a whole year to produce energy. Hence, without mountainous or coastal areas, countries are not able to have any benefits from wind power. Another thing of crucial importance is the location for installing a wind turbine, so one should go for the best probable place for installing a wind turbine to capture the maximum possible wind (Centre for Sustainable Energy, 2011), just as the sun is the main source of solar energy. Similarly, wind power heavily relies on high-speed wind to generate power continuously.

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