

Good wind energy essay example

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The Modern Hero of Energy Production

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Natural catastrophes seem to be happening more and more frequently these days: flooding, tsunamis, earthquakes, hurricanes, landslides, and so many more. Every television station displays the same sensational headlines—"the west coast of America slammed with rain"; "the east coast buried in snow." The catastrophes are no different than they have always been, but many people are now concerned about the frequency of these catastrophes. There are many scientists out there who are pointing the finger at global warming. Because of global warming, our weather patterns are changing quite dramatically and it is causing utter destruction throughout the world. So how do we stop this global warming? The conversation has been ongoing for over a decade, and one of the biggest culprits of excessive CO₂ emissions has been the burning of fossil fuels. According to Fejzo Nikollari, "Fossil fuels, from which derive 90% of energy that we use, emit carbon dioxide (CO₂) during the process of burning [which] causes warming through the greenhouse effect." He goes on to explain that "The combustion processes produces also carbon oxide (CO), nitrogen (NO), sulfur (SO₂), hydrocarbons (HC) that are the main causes of environmental pollution and acid rain" (2014, p. 156). These are two major environmental hazards and continuing to use these fossil fuels with this knowledge is blind ignorance. In order to reduce and possibly eliminate our reliance on fossil fuels, it is necessary to seek out alternative energy sources. One of the most versatile and accessible of these renewable sources is wind energy.

It seems like wind farms are popping up all over the place. Vast fields of

massive turbines are littered throughout the landscape of the Midwest, and still there is more need for this type of alternative energy. The boom era of wind energy does seem to be evening out, but because of the boom, there is now lots of information about the numerous benefits of such a source.

However, there are a few issues that need to be considered with wind turbines in making them an effective alternate source of energy. In a recent study done in Albania, Nikollari found that a turbine at a height fifty meters with a potency of 650 kilowatts in wind would produce enough energy for five hundred families in one day (2014, p. 159). That being said, when the height of the turbine is considered, it can produce a tremendous amount of energy that can be extremely beneficial and could take a huge burden off of the fossil fuels.

But what if there isn't any wind? This question is often directed towards proponents of wind turbines. The truth of the matter is that yes, to utilize wind energy there needs to be a particular set of circumstances met in order for the wind turbines to be effective. Wind speed is the most important factor, and the standard speed for economically generated power is 6.7-7.4 meters/second ("How Wind", 2014). Still, this criteria is met along the entire west coast, the entire east coast, and throughout the central states.

Although it does require a significant amount of testing and consultations, the economic and environmental benefits far outweigh the risks. As the Union of Concerned Scientists state, "With increasingly competitive prices, growing environmental concerns, and the call to reduce dependence on foreign energy sources, a strong future for wind power seems certain" ("How Wind", 2014). The only direction for the future is one founded in alternative energy sources like wind energy instead of the traditional fossil

fuels currently used.

The positive benefits of wind energy are widely understood in terms of our reliance on fossil fuels, but there are some additional benefits that scientists are discovering lending even more appeal to this alternative energy source. The latest discovery was that wind turbines could actually help to protect the coastlines from hurricanes (“ Study Shows”, 2014, p. 831). Researchers found that “ some kinetic energy at the leading edge of the storms was transferred to the turbines.” The study went on to explain how one study showed that “ not only were winds lessened by 92 mph, but storm surge was reduced by 79%” (“ Study Shows”, 2014, p. 831). This is an incredible revelation because of the response some people have to wind farms. Many oppose wind farms because of how they look, and many people find it difficult to embrace new things when the old is still available. Yet, with this discovery, wind turbines have another appeal that most people can identify with: protection and survival. Plus, as more and more wind farms spring up, the more potential for other yet undiscovered benefits.

There are still those who oppose wind farms for other environmental reasons, which is difficult for the argument because the positive effects on the environment is one of the strongest pieces of evidence in support of wind turbines. Many scientists are concerned about the effects that these turbines will have on bird populations. There is evidence that animals have been killed by wind turbines, bats and birds in particular. The numbers are difficult to collect, but biologists are still in support of wind turbines. They just believe that the issue should be monitored (Boyle, 2013). In another study, a group of scientists including Victoria Bennett wanted to study the indirect effects on wildlife, thinking that the wind turbines would negatively impact shrub-

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nesting birds near wind turbines. Contrary to their expectations, they discovered that “ nests closer to wind turbines had a lower probability of being brood parasitized and subsequently had higher nest success rates” (Bennet et al., 2014, p. 317). In this instance, the wind turbines seemed to have a positive effect on the success rates of the nest.

As with most issues, there are going to be positive and negative aspects. The only way to make a decision is to be informed and with that knowledge make the best choice available that helps the majority. With wind energy, evidence seems to suggest that the benefits outweigh the risks, and that if we are to contend with global warming and the environmental catastrophes that will ensue, wind energy along with other alternative energy resources are a must.

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