Alternative Energy: The Outdoor Education Center's Move Toward Wind Energy

West Virginia is the largest producer of coal in the United States, and with over 30 states receiving the majority of their electric power from this natural resource the industry is going stronger then ever. The *West Virginia Office of Miners Health, Safety, and Training* reports that West Virginia alone generates 99% of its electricity from coal mined in the state. However, it is understood that these fossil fuels will not be around indefinitely, and there is a push to figure out ways to harness new energy sources.

Wind Generators, some people believe, is the new wave of renewable energy source. The towering, free standing generators produce no greenhouse gas emissions and significantly less waste products in the process of producing energy, as well as have no effect on water sources. *West Coast Energy*, an independent wind energy developer, states that a single modern wind turbine, can save over 4000 tons of CO2 emissions in annually. Although the idea of alternative wind energy seems to be a fresh take on creating electricity, wind power is not a new concept. The knowledge and the means to harness wind power has been around since the 7th century AD. It has been used for irrigation pumping and milling for decades but its use as a modern, large-scale, electric producer has only been in use since the late 1970's. West Virginia installed its f rst large scale wind farm in 2002.

The Outdoor Education Center of For Love of Children is taking steps in reducing their carbon footprint by erecting their own small-scale wind turbine. The wind turbine will help supplement the electricity in their Lodge's power grid and will produce 1.75 kilowatts of electricity per hour. Any energy not consumed by the Lodge will become net-energy where it will then be sent to the Allegany Power grid. The unused energy will then supplement electricity for local consumption. This 7ft diameter wind turbine will not only reduce their dependence on coal-generated electricity, but also be used as a teaching tool for their students. In addition to the OEC's already existing solar panel teaching tools, they will be able to show and demonstrate the powerful use of alternative, renewable energy sources.

While research continues for cleaner energy sources, the OEC continues to advance its own technologies and remains on the leading edge in environmental education. They are strongly dedicated to creating a well-built, self sustained, learning environment for all who come to enjoy the center's wilderness reaches.

Reference:

1) http://www.wvminesafety.org/wvcoalfacts.htm
2) http://www.wvhighlands.org/VoiceText%20PDFs/VoiceApr06%20P18.pdf
3) http://www.westcoastenergy.co.uk/why-wind/dispelling-the-myths.aspx
4) http://en.wikipedia.org/wiki/Wind_power