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Sunny Blow! A Comparative Research Between Wind And Solar Energies

The purpose of this experiment was to determine which type of renewable energy is more efficient, wind or solar. This benefits mankind by providing us with information to change our electrical needs from fossil fuels to wind or solar energy. The first steps in the project were to assemble the wind turbine and solar panel kits. The wind turbine came with no directions so the researcher had to assemble it according to the knowledge he had about wind turbines. The next step was to expose the turbine to the outside weather. The solar panel was also exposed to the sun for the same amount of time that the wind was exposed to the wind turbine. A multimeter was used to test the resistance (ohms), voltage (volts), and amperage (amps). Once recorded, the equation was used to figure out the Power in Wind = (½ x density of the air) x (area of the blades) x (velocity3 of the wind). Wind velocity was measured using an anemometer. Power of each was also determined using the formula Watts = Voltage x Current. Overall the wind energy did the best. It led the solar energy by .129 volts, .068 amps, and .06052275 watts. In conclusion the experiment suggested that perhaps wind energy could be more efficient and more productive when compared to solar energy.