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*The Effects of Magnetism and Algae on Voltage on Tin Oxide Plates*

Globally 1.2 million people go without electricity and “ninety-five percent of these people are either in sub-Saharan Africa or developing Asia, (International Energy Agency). The primary energy sources around the world (oil, fossil fuels, etc.) have created a dramatic change in the Earth’s climate and have negatively impacted the world’s wildlife and ecosystems. This experiment used natural algae growth found in water and magnets as a way to create a renewable and environmentally friendly energy source; the increase of electrons that both the algae and magnets create will help generate a more powerful energy source. Tin oxide plates, which produce no voltage, are placed in water that contains algae, collected from fish tanks full of nutrients and natural growth, while magnets are placed in varying positions to test and observe either an increase or decrease of voltage.