

Laura Brothers
The Wind, the Windmill and the Windcube

Many people are trying to find ways to generate clean, renewable energy. One of these ways is wind energy. It is free and produces no pollution.

This experiment tries to amplify the wind through a windcube creating more DCV (Direct Current Volts) through the windmill. Many places don't have a consistent wind speed so the question is: Does a windmill generate more energy with or without the windcube? The hypothesis predicts that the windmill will generate more electricity with the windcube in front of the windmill than without the windcube.

A windcube was designed to increase the wind speed and generate more electricity through the windmill. The voltage was measured and graphed with and without the windcube in place. The experiment demonstrated that the windcube consistently increased the DCV up to 25% by funneling wind to the windmill.

The windcube would help in places that have lower wind speed by funneling the wind, which would increase the ability to collect the air flow. Overall, this experiment shows that the windmill will generate more electricity with the windcube. The windcube could be used on the top of buildings, where space is an issue and wind is inconsistent, or in places where wind is not constant.