**Introduction**

Salam, I will be showing you how a wind turbine works and how it conducts power. I picked this project to learn how wind power works and how it conducts power from wind. So let's start, shall we?

**Research**

Wind turbines get pushed by the wind and spin in a circular formation. The wind pushes the blades on the wind turbines, spinning the main shaft to a gear-box, then a generator turns and makes power. Wind turbine usually has one or more magnets, and most of the time It is neodymium magnets. The rotating shaft and the magnets are connected to the coiled copper wire, generating electricity. A single large wind turbine can power over 460 houses, or in other words, the amount of power an average wind turbine can produce is 402,000 kWh of energy every month. According to Paul Sclavounos, professor of mechanical engineering and naval architecture at MIT, it would take 400 5 Megawatts to power all of new york city and their average annual electric consumption. Also in each year, a signal wind turbine can produce energy up to 6 million kWh.

**Hypothesis**

I think that the wind from the fan will send enough power to the wind turbine. The fan should allow it to transfer enough energy making them both light up. Placing the fan between both wind turbines would make both lights turn on at the same time and provide power.

 **Procedure**

1. Grab a container

2. Grab three wood plank, one in 6 inches, 1.5 inches and 1 inch

3. Drill and screw to drill wood plank 6 inches and 1.5 inches

4. Assemble generators with led lights and Turbine blades

5. Hot glue gun the wood on one end to the edge of the container. Let it dry repeat on another end with the other wood piece.

6. Hot glue gun the generators to each side of the plank where the blades can rotate in the same direction.

7. Use the fan to move the Wind Turbine

8. Watch to see if the lights turn on.

Conclusion

In conclusion, I found out how a wind turbine produces power and how its constructed. I have also found out how much energy can be made from wind and how many items a single wind turbine can power and how much wind power it took to power the two light bulbs in the video. It was hard for me to place the fan at the right spot to spin both fans enough to produce the necessary power to light up both lights. It took 0.55 Watts to power each light bulb and the right amount and direction of the wind. Even though this experiment has a small wind turbine that produces very little power, I believe wind energy has a bright future.