**The Wonders of Wind**

**How Wind Energy Works**

**1. Wind**
Wind is air in motion. It is produced by the uneven heating of the Earth's surface by the sun.

**2. Blades**
Wind turns the blades of large turbines. These turbines spin generators to create electricity.

**3. Transformer**
A transformer increases the voltage to be sent to a substation.

**4. Substation**
Transmission lines connect the electricity output at the substation to the electrical grid.

**5. Clean Energy**
Clean wind energy is now ready to be distributed throughout your community!
WIND
Wind is air in motion. It is produced by the uneven heating of the Earth’s surface by the sun.

CATCH MY DRIFT?
The nacelle is turned to face the wind so the blades are forced to rotate.

IT'S ELECTRIFYING!
The rotor connects to the main shaft, which turns inside the generator housing. A magnetic rotor spins inside loops of copper wire. This causes electrons to flow, creating electrical energy.

TRANSFORMER
The electricity generated then travels down large cables through the tower to a transformer where it increases the voltage to be sent to a substation.

A SUB ABOVE
From the substation, electricity flows from high voltage transmission lines to lower-voltage distribution lines.

HOME SWEET HOME
Clean, renewable, wind energy is safely distributed to communities throughout the area!