

Windmill vs. Generator

What is the transfer of energy?

Transfer of Energy: the movement of energy from one place to another.

- Energy transfers can happen within the same forms of energy
 - For example: the kinetic energy of a fan transfers to kinetic energy in the windmill.
- Energy transfers can happen between different forms of energy.
 - For example: the electric energy from an outlet transfers to mechanical energy in a blender.

Different forms of Energy

- **Mechanical energy-** Mechanical energy is energy that results from movement or the location of an object. Mechanical energy is the sum of kinetic energy and potential energy.
- **Kinetic energy-** Kinetic energy is the energy of motion of a body.
- **Potential energy-** Potential energy is the energy of an object's position.
- **Electrical energy-** Electrical energy is defined as an electric charge that lets work be accomplished.
- **Thermal energy-** Thermal energy or heat energy reflects the temperature difference between two systems.
- **Chemical energy-** Chemical energy results from chemical reactions between atoms or molecules.