

**Appliance:** A piece of equipment, commonly powered by electricity, used to perform a particular energy driven function. Examples of common appliances are clothes dryer, dishwasher, microwave, oven, and refrigerator.

**Battery:** An energy storage device made up of one or more electrolyte cells.

**Biofuels:** Plant materials and animal waste (biomass) used as a source of fuel.

**Biomass:** Any organic (plant or animal) material which is available on a renewable basis, including agricultural crops (corn) and agricultural wastes, wood and wood wastes, animal wastes (manure), landfill wastes and aquatic plants.

**Conservation:** The act of protecting nature – water, plants and wildlife. The act of conservation around the home, like saving electricity and using less water, protects natural resources for future generations.

**Efficient Energy Use:** Refers to using less energy for a constant service. Driving the same distance with a higher mileage vehicle is an example of energy efficiency.

**Energy Conservation:** Reducing energy consumption through using less of an energy service. Powering off a computer when not in use as a form of energy conservation is an example of energy conservation.

**Energy:** The ability to do work or the ability to move an object. Energy is any source of usable power.

**Fossil Fuels:** Fuels (coal, oil, natural gas) that result from the compression of ancient plant and animal life formed over millions of years.

**Fracking:** The process of injecting water, chemicals and sand at high pressure into bedrock to force open existing cracks to extract natural gas; also called hydraulic fracturing.

**Fuel:** Any material that can be burned to make energy.

**Geothermal Energy:** Energy made by using the internal heat of the Earth.

**Types of Geothermal Energy:** hot water, hot dry rocks, magma, compressed hot water aquifers, and ground-source heat.

**Hydro Energy:** Power made from the energy of falling water or fast running water.

**Incineration:** A waste treatment process that involves the burning of organic substances contained in waste materials.

**Laws of Energy:** (1) Energy can neither be created nor destroyed; (2) Energy can only change from one form to another; (3) When energy is used, it becomes less and less available for further work

**Non-renewable Energy Sources:** These natural resources often exist in a fixed amount, and are consumed much faster than nature can recreate them. Fossil fuels, such as coal, petroleum and natural gas are examples of non-renewable energy sources.

**Nuclear Energy:** The use of nuclear reactions that release nuclear energy to generate heat, which is then used in steam turbines to produce electricity in a nuclear power plant.

**Ocean Energy:** Creating energy from winds, tides and ocean currents.

**Renewable Energy Sources:** Naturally occurring, supposedly limitless sources of energy that cannot be depleted. Examples include the sun, wind, water, biomass, geothermal.

**Solar Energy:** The radiant energy of the sun, which can be converted into other forms of energy, such as heat, light or electricity.

**Solar Panel:** A collection of solar (or photovoltaic) cells designed to absorb the sun's rays as a source of energy for generating electricity or heating.

**Thermostat:** A device that adjusts the amount of heating and cooling produced and or distributed by automatically responding to the temperature in the environment.

**Tide:** Movement of the water created by the gravitational effect of the sun and the moon on the earth causing cyclical movement of the oceans and seas.

**Tidal Energy:** A form of hydro / water energy that changes the energy of the tides into electrical energy.

**Transformer:** A device which converts the generators low-voltage electricity to higher voltage levels for transmission to a factory or a city.

**Watt (W):** The watt is a derived unit of power in the International System of units (SI), named after the Scottish engineer James Watt. Its unit symbol is W. The unit measures the rate of energy consumption per hour. For example, a 60-watt light bulb uses 60 watts of energy in one hour.

**Wind Energy:** A renewable source of energy used to turn turbines to generate electricity.