

## How Does Solar Energy Work

How does solar energy work? This is a common question with increasing heating costs and a bad economy. Many people are looking to save money any way they can. Offsetting household energy costs is something that can be accomplished by producing your own power with solar energy. So, how does solar energy work? Read on for some information on solar energy.

To start with solar energy is the harnessing of light and heat from the sun. Most renewable energy that is available comes from solar radiation with some also coming from hydroelectricity, wave power and wind power. Photovoltaics (PV) and heat engines use electricity that is provided by solar power. Uses of this energy are limited only by invention. Meaning that as the technology improves better and more efficient applications will emerge.

Solar energy works in different ways depending on what is desired by the person using it. A greenhouse is probably one of the most well known uses of solar energy. A greenhouse works by using solar light for heat. One of the most desired uses for solar energy, at least from a single dwelling perspective, is the generation of electricity. PV and CSP (concentrating solar power) can convert sunlight into electricity. Applications can range from small (a calculator with a solar cell) to an array of PV panels to power a home. A home working off its own power supply is commonly referred to as “living off the grid”.

A PV cell uses a photoelectric effect to convert light into an electric current. Solar energy has the potential to meet all of the energy demand on Earth. Solar power clearly has vast potential but is producing a small percentage of energy today. There are also many competing technologies for solar power.

Since solar energy is not constant, it is not available at night, storage methods are needed to provide energy at down times. Rechargeable batteries are commonly used for storage by people with personal off-grid PV systems. A person with a PV system can even transfer excess energy to the grid and receive credit for when they need to use power from the grid.

Using the sun for energy is great. Living off the grid is very possible with a personal PV array. Solar energy can work for you and help you keep some of your hard earned money in your pocket. Give it a thought and check out Earth 4 Energy for more information on getting started with your own solar panels.