

Solar Energy

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What is Solar Energy?

Solar energy works by capturing the sun's energy and turning it into electricity for your home or business. Our sun is a natural nuclear reactor. It releases tiny packets of energy called photons.

What is a solar cell?

A solar cell is a device people can make that takes the energy of sunlight and converts it into electricity. Solar cells are the building blocks of solar panels. Solar cells are made of semiconductor materials like silicon that produce a “photoelectric effect” when exposed to sunlight. The photoelectric effect occurs when sunlight knocks electrons loose from their atoms. The electrons then travel along a circuit built into the solar cell, creating a current of electricity. Then electricity can then be used immediately or stored in batteries.

How does a solar cell turn sunlight into electricity?

Sunlight is composed of photons of light. When the sun is shining, its absorbs the photons and their energy.

How do solar panels supply energy?

Solar panels are devices that convert light into electricity. They are called “solar” panels because, most of the time, the most powerful source of light available is the Sun. Scientists call them photovoltaics which means, “light-electricity.”

A solar panel is a collection of solar cells. Lots of small solar cells spread over a large area can work together to provide enough power to be useful. The more light that hits a cell, the more electricity it produces.