

A group of solar panels generates electricity





Overview

How do solar panels produce electricity?

Solar panels use sunlight to create electricity. They have special materials, called photovoltaic cells, that change sunlight into electrical energy. What is the photovoltaic effect?

The photovoltaic effect is a process where sunlight hits the solar cells and makes electrons move, which creates electricity.

How does solar energy generation work?

Solar energy generation follows a structured process to transform sunlight into usable electricity. This process involves several essential steps, starting with Photovoltaic (PV) cells within solar panels absorbing sunlight.

How do solar photovoltaic cells work?

Solar photovoltaic cells are grouped in panels, and panels can be grouped into arrays of different sizes to power water pumps, power individual homes, or provide utility-scale electricity generation. Source: National Renewable Energy Laboratory (copyrighted).

What is solar power & how does it work?

Solar power is all about converting sunlight into usable energy. The sun is a giant nuclear reactor in the sky, constantly sending out energy in the form of light and heat. We can capture this energy using solar panels and convert it into electricity or heat our homes and water.



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