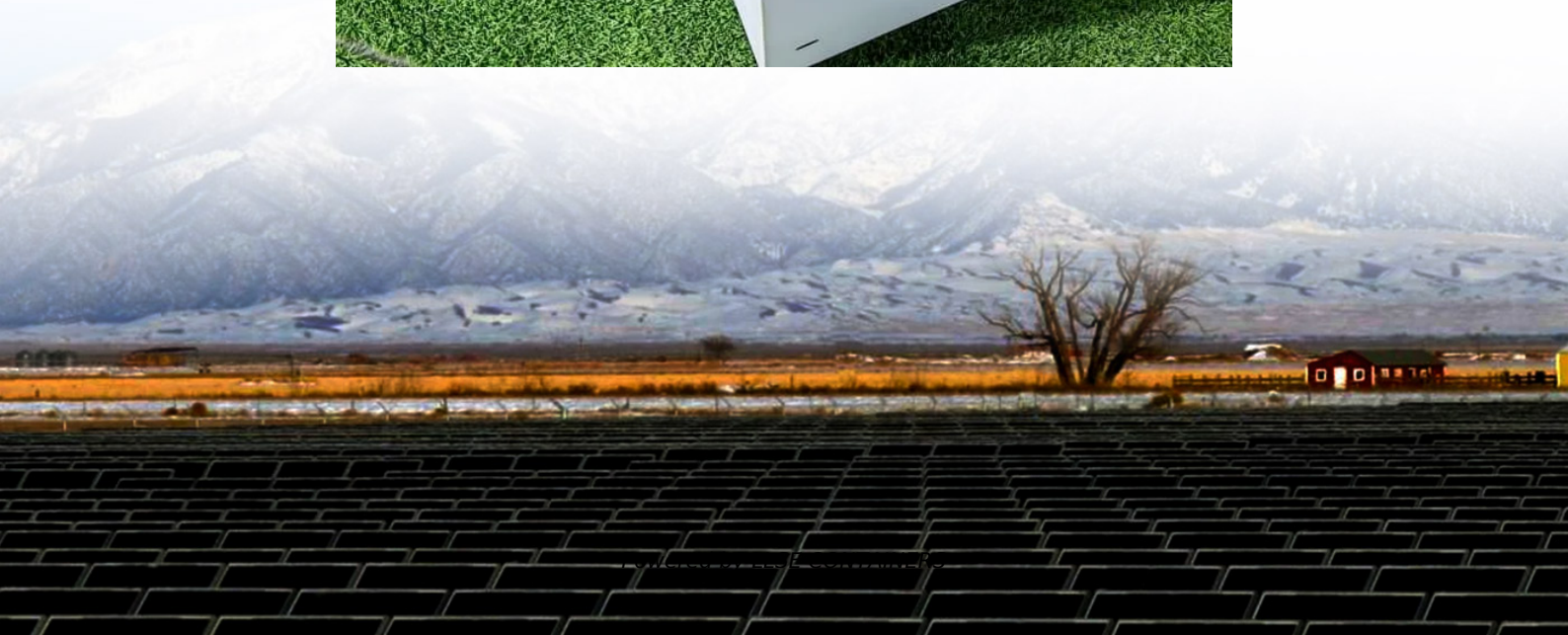


Electricity generated by solar panels





Overview

How do solar panels generate usable electricity?

Solar arrays create a usable electricity system for your home by producing direct current (DC) electricity. This is achieved through the photovoltaic effect, where solar cells convert sunlight into electrical energy.

How is solar energy generated?

Solar energy - Electricity Generation: Solar radiation may be converted directly into solar power (electricity) by solar cells, or photovoltaic cells. In such cells, a small electric voltage is generated when light strikes the junction between a metal and a semiconductor (such as silicon) or the junction between two different semiconductors.

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).

How do solar panels work?

Solar panels work by converting sunlight into electricity through a process called the photovoltaic effect. This process produces direct current (DC) electricity, which then needs to be converted to alternating current (AC) electricity for your home to use.



Electricity generated by solar panels



[Photovoltaics and electricity](#)

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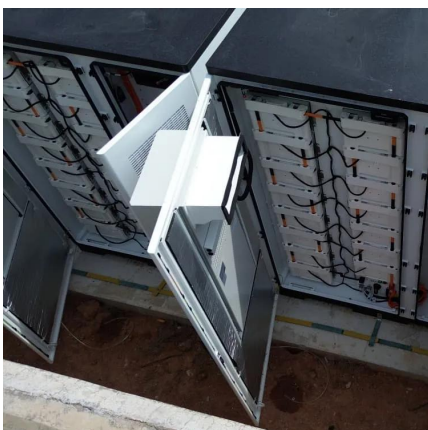
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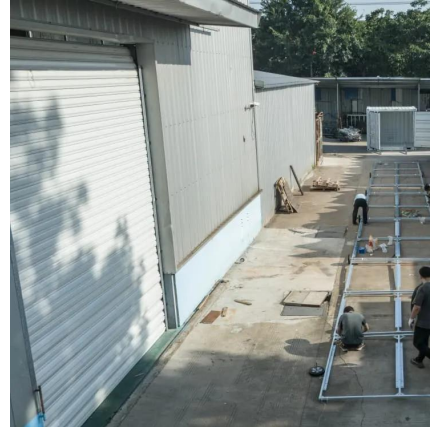
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