

Where are solar panels needed to generate electricity





Overview

What is solar energy & how does it work?

Solar energy stands out as a beacon of hope, harnessing the sun's abundant rays to generate electricity without the harmful emissions associated with traditional energy sources. With solar panels becoming increasingly prevalent on rooftops and in solar farms, understanding how they work is crucial for anyone interested in the future of energy.

How do solar panels produce electricity?

At the core of solar panels is the photovoltaic (PV) effect. When sunlight strikes the solar cells, it excites the electrons in the semiconductor material, causing them to flow through the material. This flow of electrons is what creates electricity. The more sunlight that hits the solar cells, the more electricity is generated.

How does a solar panel work?

1. Solar Energy Capture: When sunlight reaches the photovoltaic cells in a solar panel it excites the electrons within the cells. The movement of electrons causes the flow and creates an electrical current. The individual cells in a solar panel are in series connection to increase the voltage of the generated electricity.

What type of electricity does a solar panel use?

AC is the type of electrical current used when you plug appliances into normal wall sockets. What's the difference between solar PV panels and solar thermal panels?

Solar PV panels generate electricity, as described above, while solar thermal panels generate heat.



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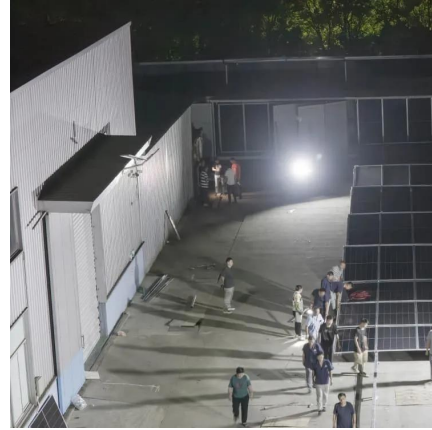
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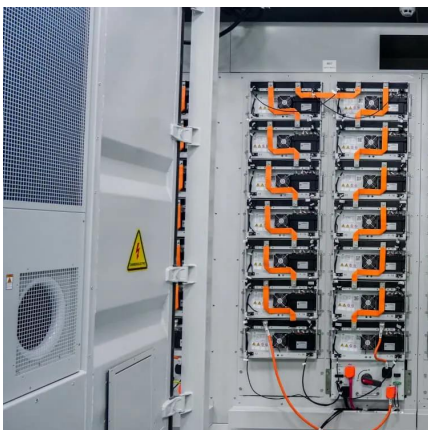


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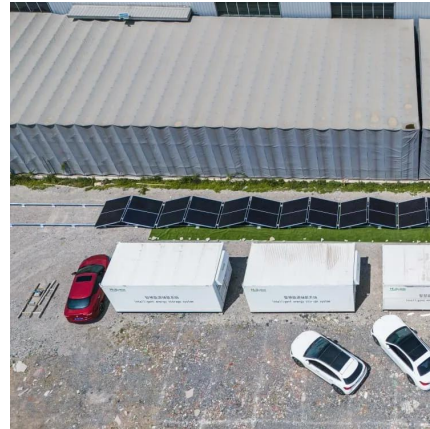
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