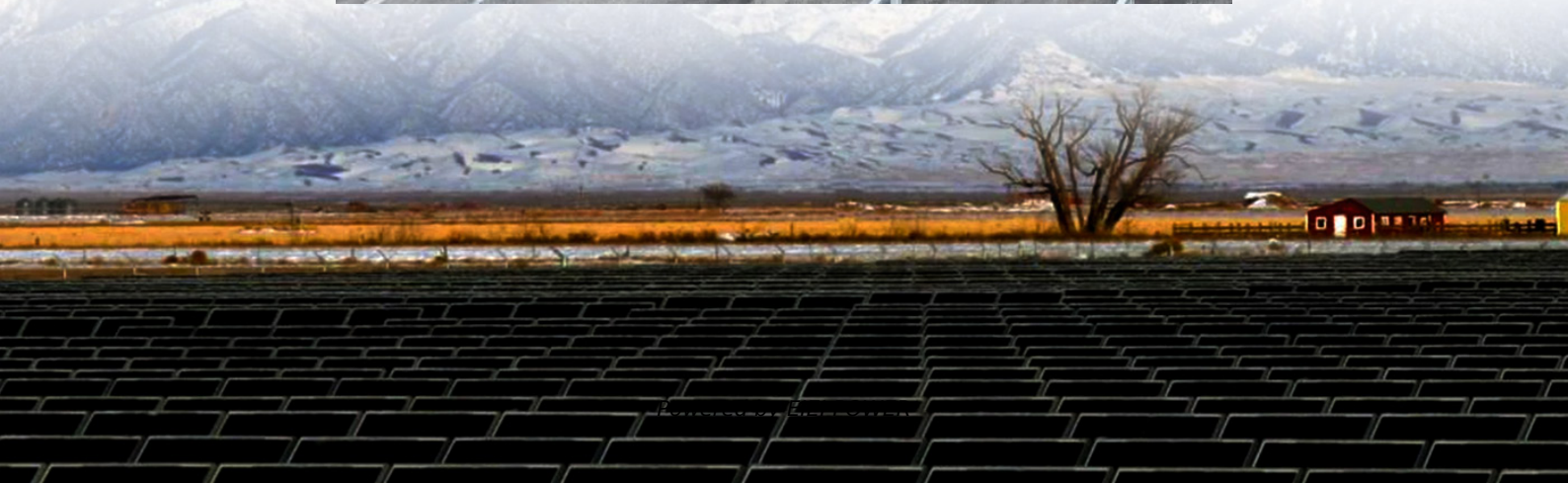
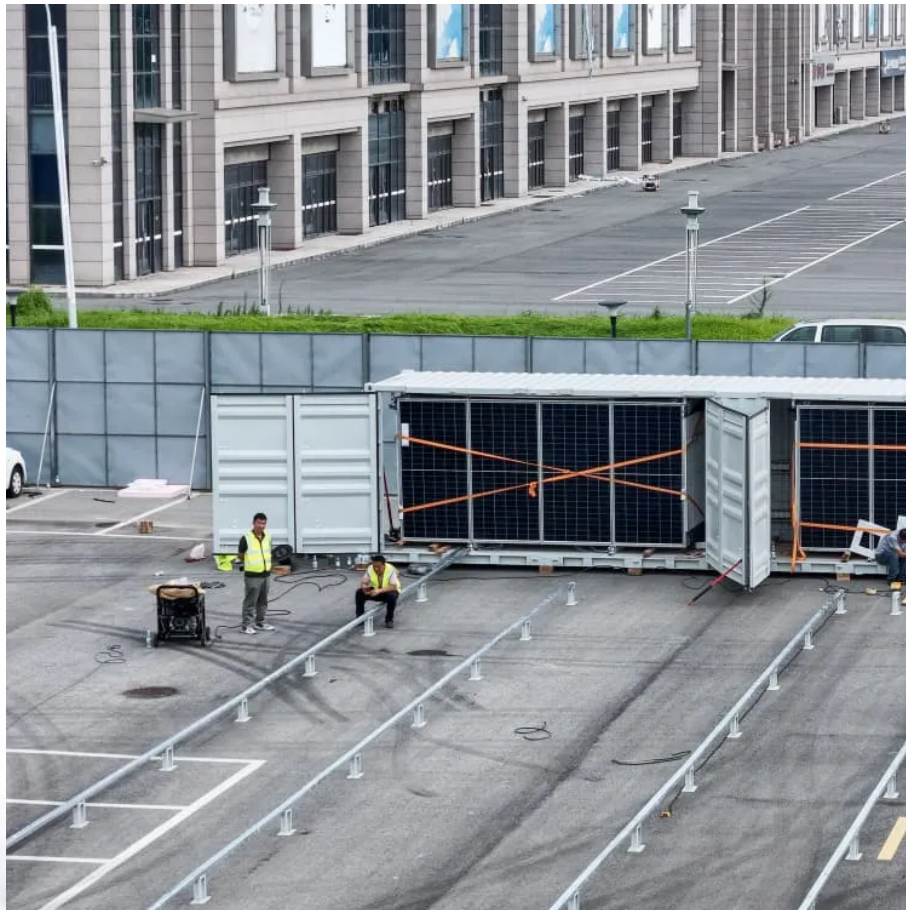


# Detailed explanation of the functions of small solar on-site energy





## Overview

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How can on-site solar PV & energy storage improve sustainability?

To achieve sustainability goals while meeting the increasing electricity demands of electrification, organizations are pairing on-site solar PV generation with on-site energy storage. These systems, which are considered as “behind-the-meter” (BTM) systems, allow facilities to maximize the benefits of on-site renewable generation.

What is solar energy?

solar energy, radiation from the Sun capable of producing heat, causing chemical reactions, or generating electricity. The total amount of solar energy incident on Earth is vastly in excess of the world’s current and anticipated energy requirements.

How do solar panels work?

You're likely most familiar with PV, which is utilized in solar panels. When the sun shines onto a solar panel, energy from the sunlight is absorbed by the PV cells in the panel. This energy creates electrical charges that move in response to an internal electrical field in the cell, causing electricity to flow.

What are the benefits of solar panels?

**Energy Independence:** Solar allows households and countries to reduce dependence on imported energy. This enhances energy security and stabilizes energy prices by reducing reliance on volatile fossil fuel markets. **Low Maintenance:** Solar panels have no moving parts and require minimal upkeep.



## Detailed explanation of the functions of small solar on-site energy

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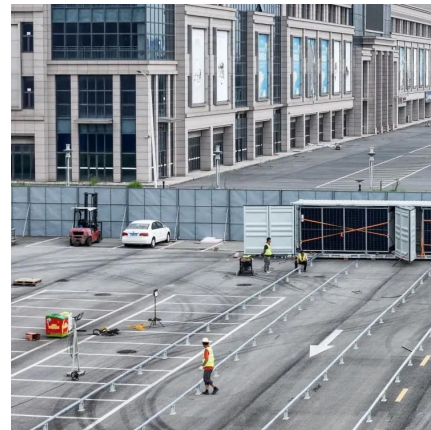


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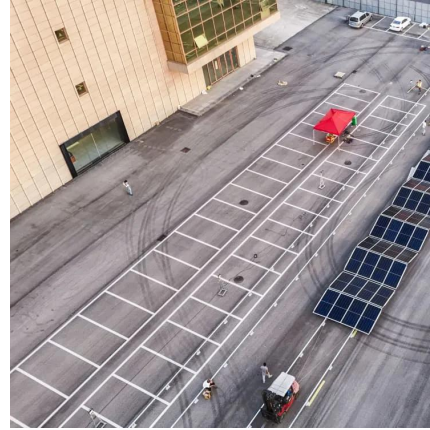
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