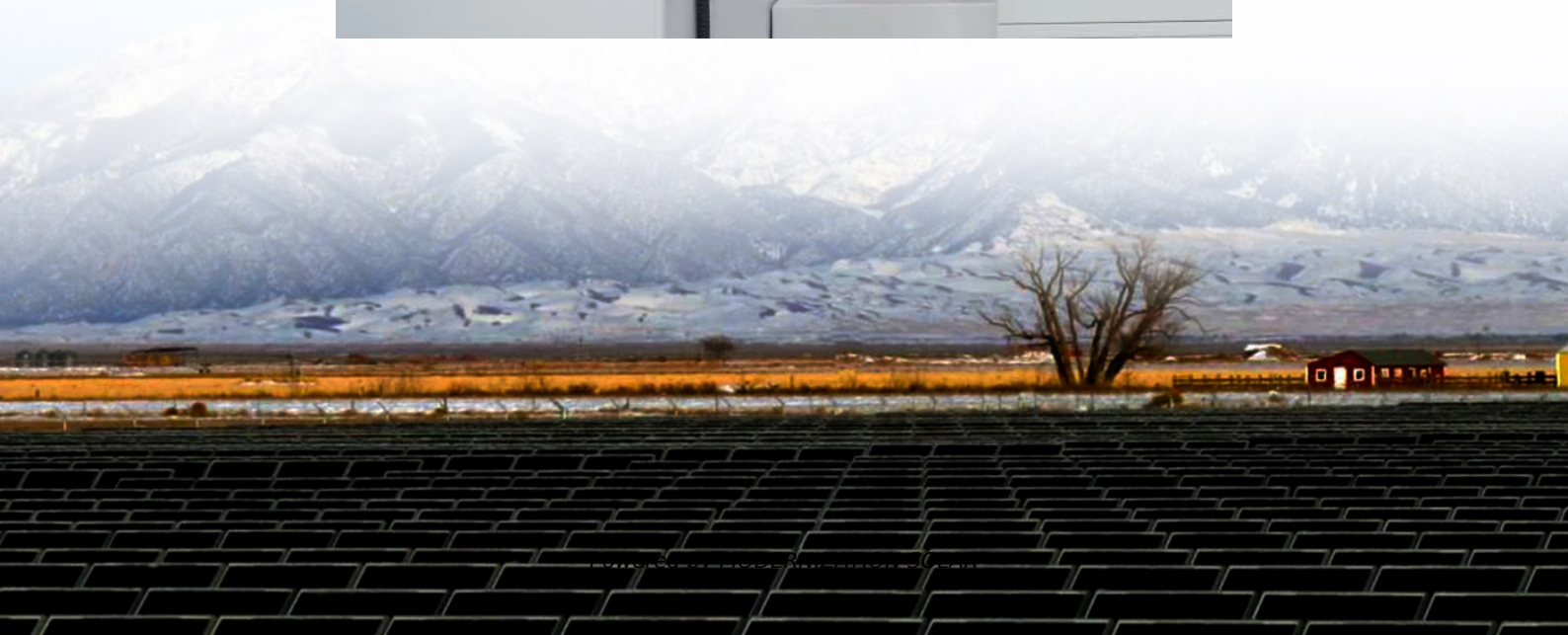


For wind and solar depositors





Overview

How do solar and wind power systems work?

Solar and wind facilities use the energy stored in batteries to reduce power fluctuations and increase reliability to deliver on-demand power. Battery storage systems bank excess energy when demand is low and release it when demand is high, to ensure a steady supply of energy to millions of homes and businesses.

Can solar PV and wind power achieve global decarbonisation goals?

This report underscores the urgent need for timely integration of solar PV and wind capacity to achieve global decarbonisation goals, as these technologies are projected to contribute significantly to meet growing demands for electricity by 2030.

Does solar-wind system address future electricity demands?

Jiang, H. et al. Globally interconnected solar-wind system addresses future electricity demands. *Nat. Commun.* 16, 4523 (2025). Peng, L., Mauzerall, D. L., Zhong, Y. D. & He, G. Heterogeneous effects of battery storage deployment strategies on decarbonization of provincial power systems in China. *Nat. Commun.* 14, 4858 (2023).

How are wind and solar generation shares calculated?

In specific, the wind and solar generation shares—corresponding to Secondary Energy | Electricity | Wind and Secondary Energy | Electricity | Solar—are calculated by dividing wind-solar generation by total electricity generation (Secondary Energy | Electricity).



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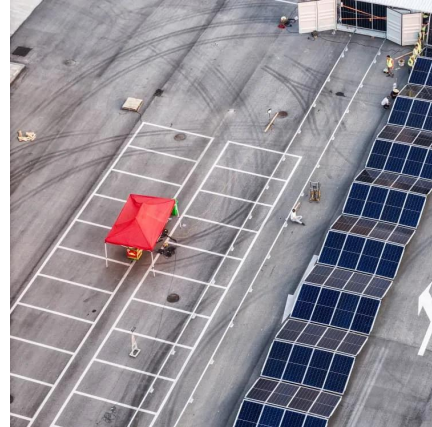
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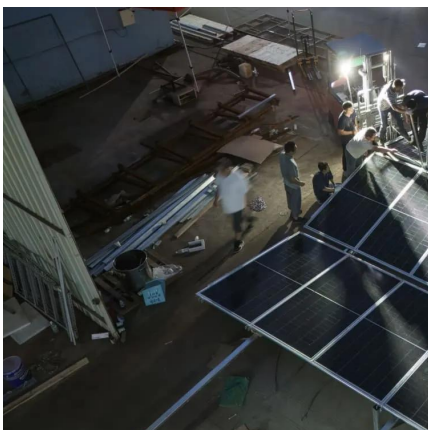


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