

# Does it require energy storage batteries to connect surplus electricity to the grid

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**Can battery energy storage systems improve power grid performance?**

In the quest for a resilient and efficient power grid, Battery Energy Storage Systems (BESS) have emerged as a transformative solution. This technical article explores the diverse applications of BESS within the grid, highlighting the critical technical considerations that enable these systems to enhance overall grid performance and reliability.

**Are battery energy-storage technologies necessary for grid-scale energy storage?**

The rise in renewable energy utilization is increasing demand for battery energy-storage technologies (BESTs). BESTs based on lithium-ion batteries are being developed and deployed. However, this technology alone does not meet all the requirements for grid-scale energy storage.

**How do you store surplus electricity?**

Surplus electricity from large home usage can be stored in battery storage systems, such as lithium-ion batteries and lead-acid batteries, or can be fed back into the grid through grid-tied systems and net metering.

**Why is storing surplus electricity important?**

Storing surplus electricity is crucial for optimizing the advantages of renewable energy sources and ensuring a stable energy supply.

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