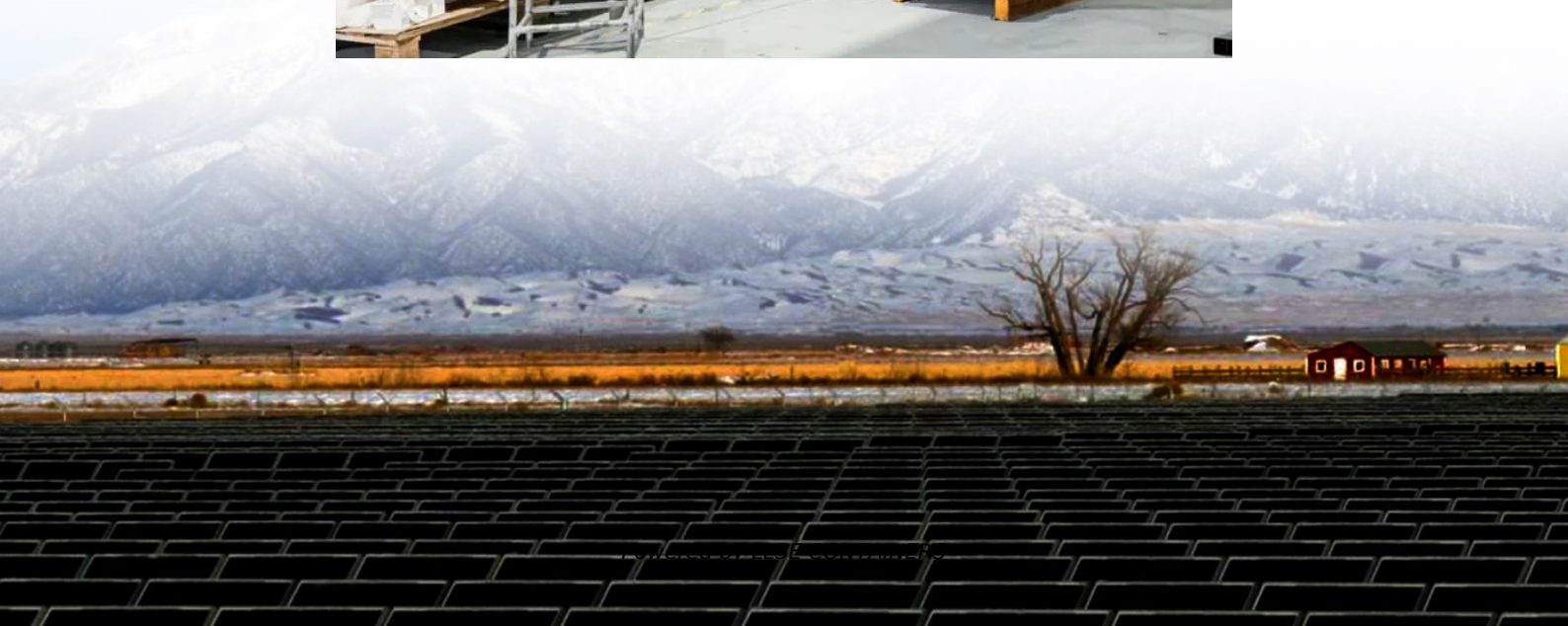


# **The current mainstream of energy storage batteries**





## Overview

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Are battery energy storage systems the future of electricity?

In the electricity sector, battery energy storage systems emerge as one of the key solutions to provide flexibility to a power system that sees sharply rising flexibility needs, driven by the fast-rising share of variable renewables in the electricity mix.

What are the different types of battery energy storage systems?

Battery storage systems can be distinguished between two classes: utility-scale battery energy storage systems and behind-the-meter battery energy storage systems. Utility-scale battery energy storage systems are directly connected to the distribution or transmission systems.

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.

Why do we need a battery energy-storage technology (best)?

BESTs are increasingly deployed, so critical challenges with respect to safety, cost, lifetime, end-of-life management and temperature adaptability need to be addressed. The rise in renewable energy utilization is increasing demand for battery energy-storage technologies (BESTs).



## The current mainstream of energy storage batteries

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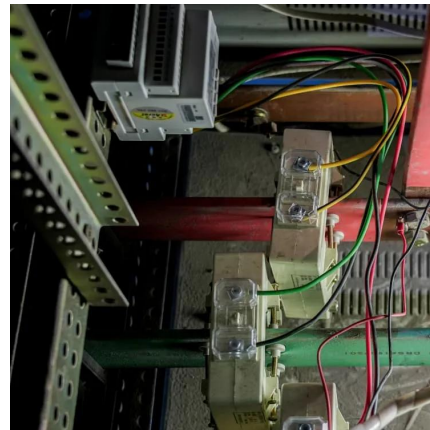


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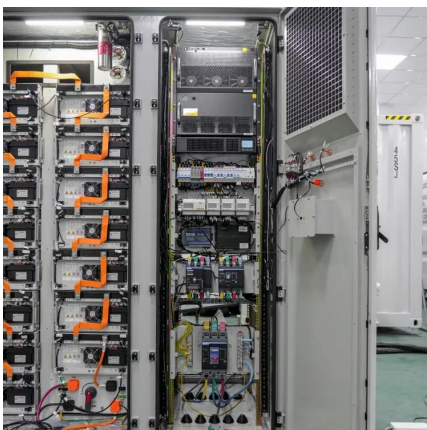
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