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# **Solid-state batteries and energy storage**





## Overview

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What is a solid-state battery?

Solid-state batteries (SSBs) promise to revolutionize energy storage by offering enhanced safety, higher energy density, and improved cycle lifespan over conventional lithium-ion batteries. Among the various solid electrolytes, polymers stand out for their unique combination of processability, mechanical compliance, and chemical versatility.

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Are solid-state batteries the future of energy storage?

Financial support for research and development in sustainable materials and processes can also drive innovation. Solid-state batteries (SSBs) hold the promise of revolutionizing energy storage across various industries due to their enhanced safety, higher energy densities, and longer cycle lives.

What are the advantages of a solid state battery?

Solid-State Batteries: Potentially higher energy densities due to the ability to use high-capacity electrode materials, such as lithium metal anodes. Solid electrolytes can also enable more efficient packing of materials, further increasing energy density.



## Solid-state batteries and energy storage



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solid ...



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