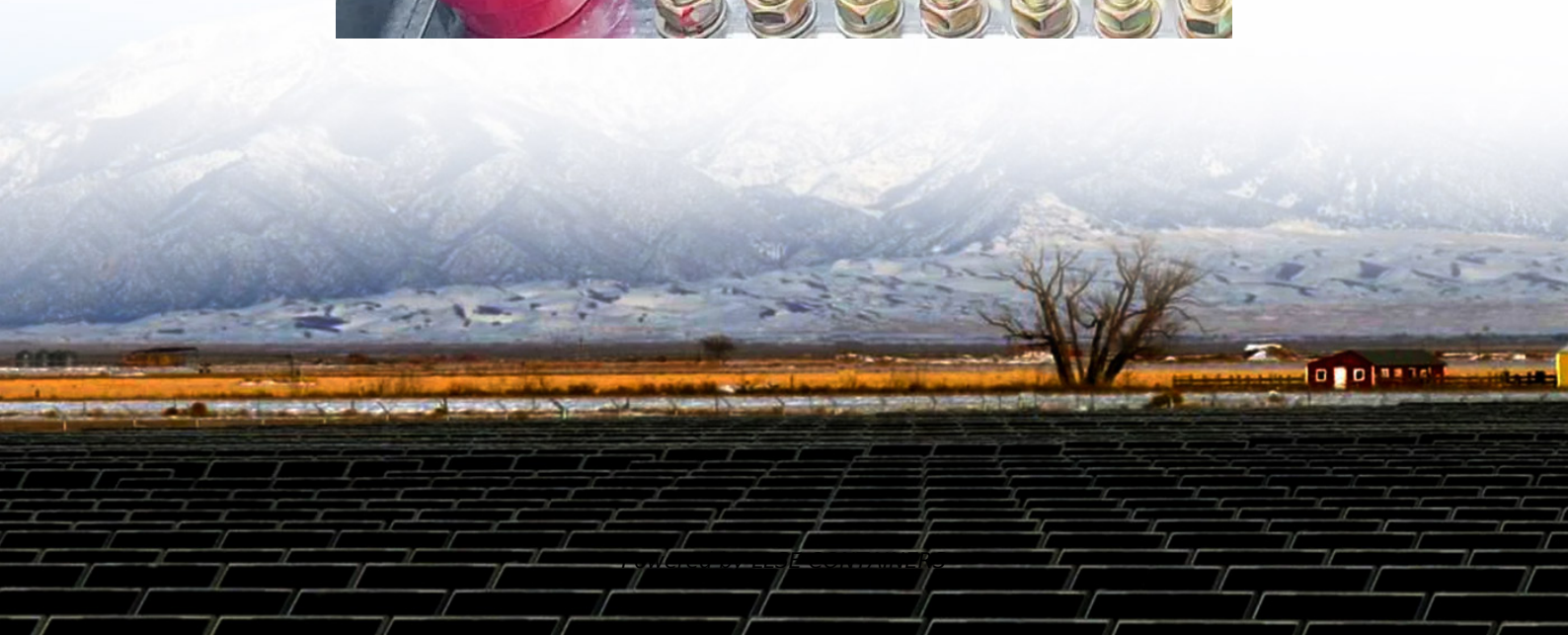


The Prospects of Flow Batteries





Overview

Are flow batteries the future of energy storage?

Realizing decarbonization and sustainable energy supply by the integration of variable renewable energies has become an important direction for energy development. Flow batteries (FBs) are currently one of the most promising technologies for large-scale energy storage. This review aims to provide a comprehensive ChemSocRev – Highlights from 2023.

What is a flow battery?

Please contact us for more information. Flow batteries are emerging as a transformative technology for large-scale energy storage, offering scalability and long-duration storage to address the intermittency of renewable energy sources like solar and wind.

Are redox flow batteries a viable energy storage system?

As one of the most promising electrochemical energy storage systems, redox flow batteries (RFBs) have received increasing attention due to their attractive features for large-scale storage applications. However, their practical deployment in commerce and industry is still impeded by their relatively high cost and low energy density.

Are flow batteries a game-changer for large-scale energy storage?

Among these innovations, flow batteries have emerged as a potential game-changer for large-scale energy storage. Recent advancements in membrane technology, particularly the development of sulfonated poly (ether ether ketone) (sPEEK) membranes, have brought flow batteries closer to widespread adoption.



The Prospects of Flow Batteries



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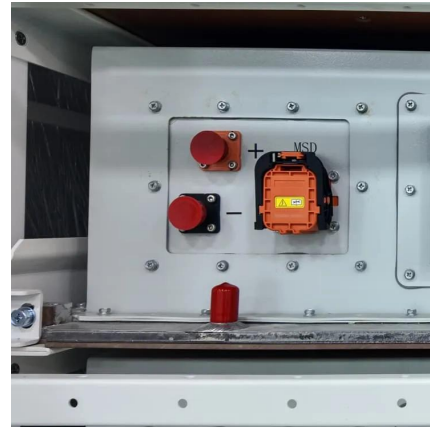
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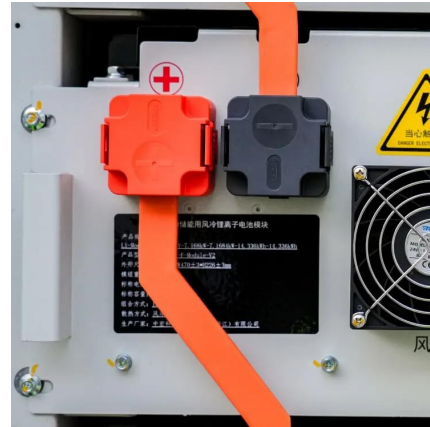
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