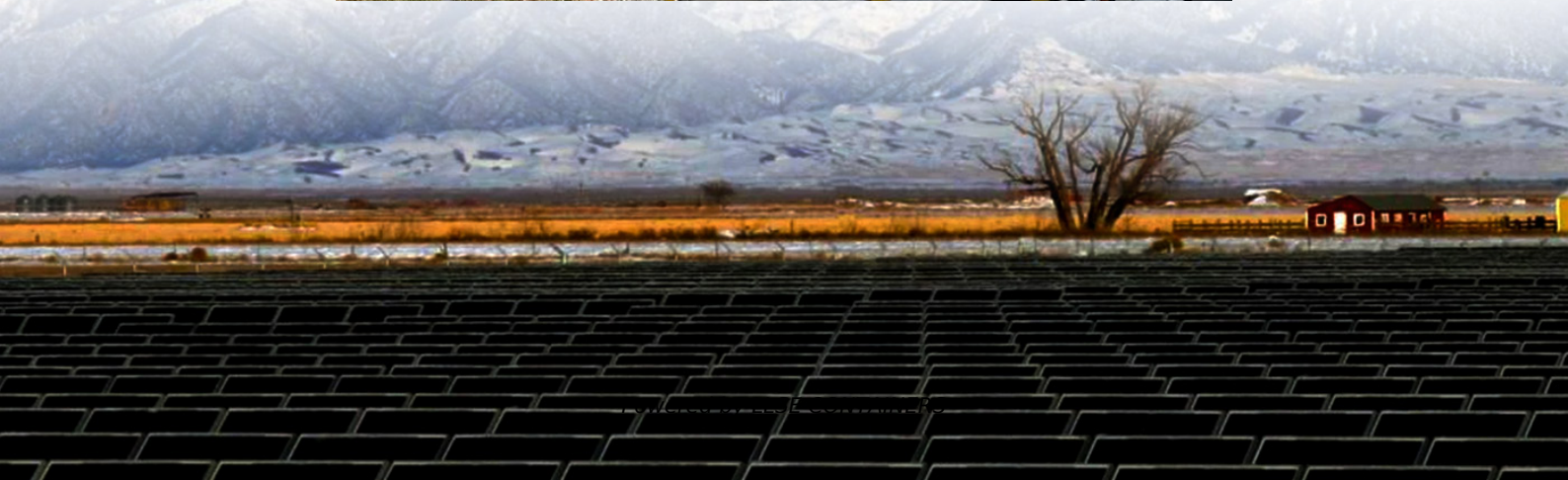


Limitation of air transport capacity of energy storage batteries





Overview

What are the risks associated with battery transport?

One of the major risks associated with the transport of batteries and battery-powered equipment is short-circuit of the battery as a result of the battery terminals coming into contact with other batteries, metal objects, or conductive surfaces.

When will lithium ion batteries be available for air transport?

From 1 January 2026, lithium-ion batteries that are packed with equipment and vehicles powered by lithium ion or sodium ion batteries must be offered for air transport with the battery at a reduced state of charge, unless otherwise approved by the relevant states (A331).S.

Are lithium ion batteries safe in air transport?

These changes have been adopted by ICAO into the 2025-2026 edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air. The objective of these changes is to reduce the potential risk posed by lithium-ion and sodium ion batteries in air transport.

Are Li-air batteries a promising energy storage technology?

Li-air batteries are a promising type of energy storage technology because of the ultra-high theoretical specific energy. Great advances are made in recent years, including the illustration of reaction mechanisms, development of effective catalyst materials, and design of battery structures accelerating species transport.



Limitation of air transport capacity of energy storage batteries



[Addressing Transport Issues in Non-Aqueous Li-air Batteries ...](#)

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[From Chemical Properties to Regulatory Limits: Five](#)

Introduction: The "25kg Ceiling" for Lithium Battery Air Transport In 2025, the global air transport market for lithium batteries reached \$42 billion, yet the International Air Transport Association ...

Battery guidance document

Feb 3, 2025 · Currently, it is strongly recommended that when offered for air transport, equipment that is packed with, or contains, lithium-ion batteries, and vehicles powered by lithium-ion ...



Limitation of air transport capacity of energy storage ...

What are the limitations of a lithium battery? However limitations primarily depend on: the lithium metal content in grams (g) for lithium metal (non-rechargeable) batteries. Watt-hour rating, ...



Energy Content of Lithium Batteries in Air Cargo

Lithium-Ion Batteries packed in equipment (UN3481) can be carried as cargo on both passenger and cargo aircraft and have no SOC limitation when offered for air transport, although the ...



Redefining the capacity limitation of Li-air batteries by

Jul 1, 2025 · Redefining the capacity limitation of Li-air batteries by uncoupling the competitive multiple-transport and nucleation Journal: Chemical Communications Published: 2025-07-01 ...





Prospects and Limits of Energy Storage in Batteries

Feb 11, 2015 · Future efforts are also expected to involve all-solid-state batteries with performance similar to their liquid electrolyte counterparts, biodegradable batteries to address ...

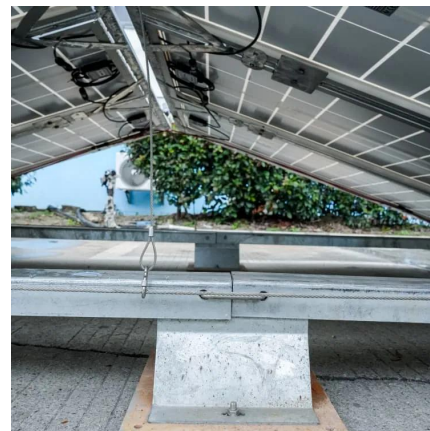


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