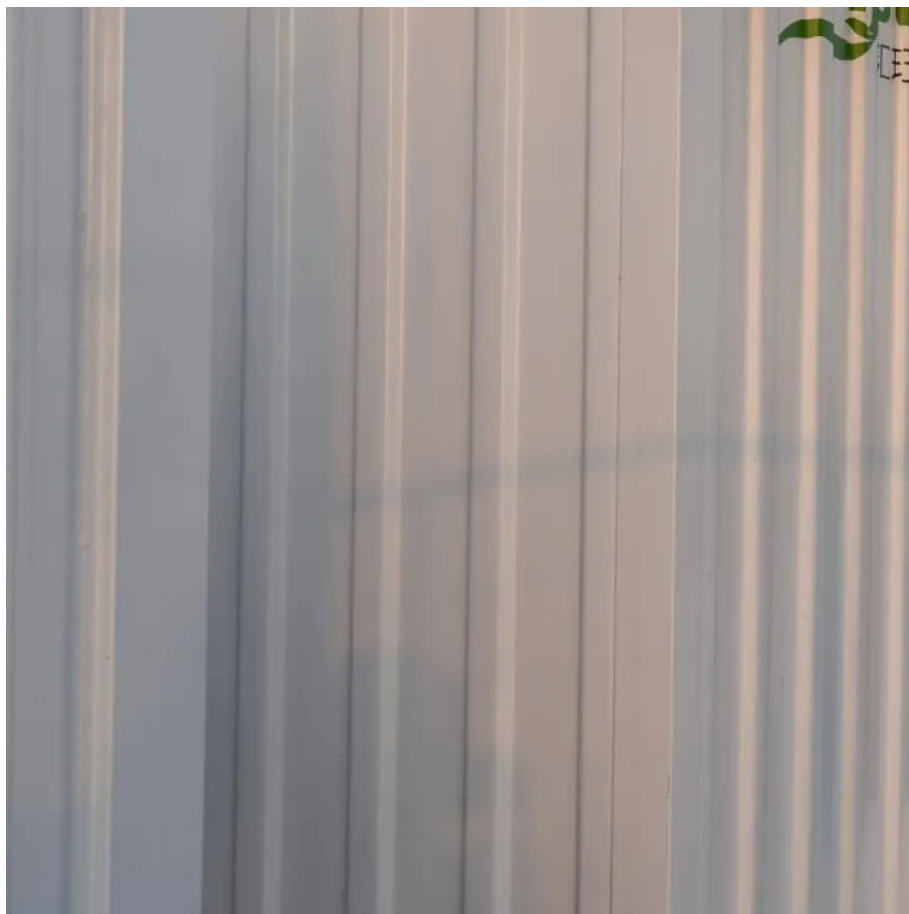


LCOS costs for energy storage





Overview

****Compute LCOS:**** Divide the total lifetime costs by the total lifetime energy stored to find the LCOS. LCOS is typically expressed in terms of cost per megawatt-hour (MWh) of energy stored. What is levelized cost of Storage (LCOS)?

The levelized cost of storage (LCOS) quantifies the discounted cost per unit of discharged electricity for a specific storage technology and application. The metric therefore accounts for all technical and economic parameters affecting the lifetime cost of discharging stored electricity.

What is LCoS & why is it important?

LCOS provides a measure of the overall costs associated with deploying and operating a storage system over its entire lifecycle, normalized by the total amount of energy stored. This metric helps project developers, investors, and policymakers compare different storage technologies and configurations on an even playing field.

What is the LCoS formula?

While the LCOS formula appears straightforward, it encompasses all aspects of a storage system's operation: Levelized Cost of Storage (LCOS) Formula:
$$LCOS = \frac{1}{E_{dist}} \sum_{t=1}^N (1+r)^{-t} (I_t + O_t + R_t - S_t)$$
 Where: LCOS = Total energy discharged over the storage system's lifecycle, Total costs incurred over the storage system's lifecycle.

What is the LCoS metric?

This comprehensive metric plays a crucial role in assessing the investment value and technological maturity of energy storage projects. While the LCOS formula appears straightforward, it encompasses all aspects of a storage system's operation:



LCOS costs for energy storage

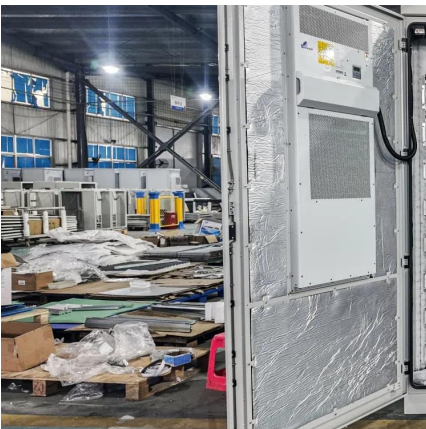


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[Lazard's Levelized Cost of Storage Analysis--Version 4.0](#)

Lazard's LCOS Analysis Overview of the selected energy storage systems for each use case analyzed and their associated operational parameters



LCOS Estimates

The following notes and assumptions apply to the LCOS estimates provided here: For almost all technologies, capital costs, O& M costs, and performance parameters correspond with those ...

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LEVELIZED COST OF ENERGY+

Note: Levelized costs presented for each Value Snapshot reflect local market and operating conditions (including installed costs, market prices, charging costs and incentives) and are ...

Lifetime cost . Storage Lab

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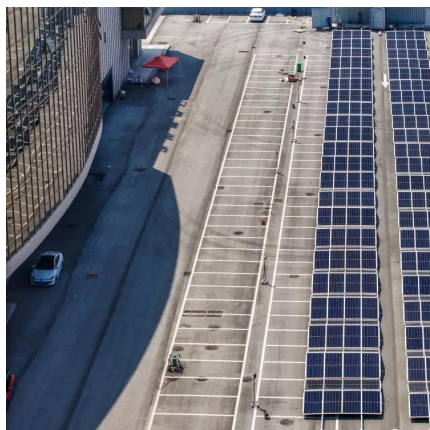


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