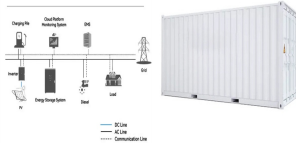


ARUBA LEVELIZED COST OF STORAGE LAZARD

System Topology



Lazard's latest annual Levelized Cost of Storage Analysis (LCOS 7.0) shows that year-over-year changes in the cost of storage are mixed across use cases and technologies, driven in part by ???



Lazard's Levelized Cost of Energy+ (LCOE+) is a U.S.-focused annual publication that combines analyses across three distinct reports: Energy (LCOE, 17th edition), Storage (LCOS, 9th edition) and Hydrogen (LCOH, 4th edition). Lazard first started publishing its comparative analysis of various generation technologies in 2007.



other advice. No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without the prior consent of Lazard. Unsubsidized Levelized Cost of Storage Comparison??? Capacity (\$/kW-year) II LAZARD's LEVELIZED COST OF STORAGE ANALYSIS V7.0 Source: Lazard estimates. 1 3



Lazard's Levelized Cost of Storage study analyzes the levelized costs associated with the leading energy storage technologies given a single assumed capital structure and cost of capital, and ???

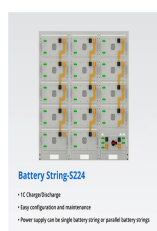


Lazard's latest annual Levelized Cost of Energy Analysis (LCOE 12.0) shows that, in some scenarios outlined below, alternative energy costs have decreased to the point that they are now at or below the marginal cost of conventional generation. Lazard's latest annual Levelized Cost of Storage Analysis (LCOS 4.0) shows significant cost

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Lazard's latest LCOE shows the continued cost-competitiveness of certain renewable energy technologies, and the marginal cost of coal, nuclear, and combined-cycle gas generation. Levelized Cost of Storage: Version 8.0. The central findings of our LCOS analysis reinforce what we observe across the Power, Energy & Infrastructure Industry



Lazard's latest annual Levelized Cost of Energy Analysis (LCOE 11.0) shows a continued decline in the cost of generating electricity from alternative energy technologies, especially utility -scale solar and wind. Lazard's latest annual Levelized Cost of Storage Analysis (LCOS 3.0), conducted with support from



LCOE costs in future iterations of this report (albeit not necessarily higher relative costs). Lazard's latest annual Levelized Cost of Storage Analysis (LCOS 7.0) shows that year-over-year changes in the cost of storage are mixed across use cases and technologies, driven in part by the confluence of



Lazard undertakes an annual detailed analysis into the levelized costs of energy from various generation technologies, energy storage technologies and hydrogen production methods. Below, the Power, Energy & Infrastructure Group shares some of the key findings from the 2023 Levelized Cost of Energy+ report. Levelized Cost of Energy: Version 16.0

Commercial and Industrial ESS

Air Cooling / Liquid Cooling

Budget-Friendly Solution

Renewable Energy Integration

Modular Design for Flexible Expansion



ii Lazard's levelized cost of storage analysis v5.0 For comparison purposes, this report evaluates six illustrative use cases for energy storage; while there may be alternative or combined/"stacked" use cases available to energy storage systems, the six use cases below represent illustrative current and contemplated

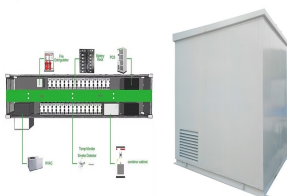
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II LAZARD's LEVELIZED COST OF STORAGE ANALYSIS???VERSION 8.0. 15: III LAZARD's LEVELIZED COST OF HYDROGEN ANALYSIS???VERSION 3.0. 24: APPENDIX . A Maturing Technologies: 29. 1 Carbon Capture & Storage Systems: 30. 2 Long Duration Energy Storage: 33. B LCOE v16.0: 36. C LCOS v8.0: 41. D LCOH v3.0: 43. APRIL 2023



Lazard's Levelized Cost of Energy+ (LCOE+) is a U.S.-focused annual publication that combines analyses across three distinct reports: Energy (LCOE, 17 th edition), Storage, (LCOS, 9 th edition) and Hydrogen (LCOH, 4 th edition). Lazard first started publishing its comparative analysis of various generation technologies in 2007.



Lazard's latest annual Levelized Cost of Energy Analysis (LCOE 13.0) shows that as the cost of renewable energy continues to decline, certain technologies (e.g., onshore wind and utility-scale solar), which became cost-competitive with conventional generation several years ago on a new-build basis, continue to maintain competitiveness with the marginal cost of existing ???



II LAZARD's LEVELIZED COST OF STORAGE ANALYSIS V6.0 3 III ENERGY STORAGE VALUE SNAPSHOT ANALYSIS 7 IV PRELIMINARY VIEWS ON LONG-DURATION STORAGE 11 APPENDIX A Supplemental LCOS Analysis Materials 14 B Value Snapshot Case Studies 1 Value Snapshot Case Studies???U.S. 16 2 Value Snapshot Case Studies???International 23



Lazard's latest annual Levelized Cost of Energy Analysis (LCOE 11.0) shows a continued decline in the cost of generating electricity from alternative energy technologies, especially utility-scale solar and wind. Lazard's latest annual Levelized Cost of Storage Analysis (LCOS 3.0), conducted with support from Enovation Partners, shows

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LAZARD's LEVELIZED COST OF HYDROGEN ANALYSIS Overview of Analysis Lazard has undertaken an analysis of the Levelized Cost of Hydrogen ("LCOH") in an effort to provide greater clarity to Industry participants on the ("LCOE") and Levelized Cost of Storage ("LCOS") studies. Given this breadth, we have decided to focus the



The mean levelized cost of energy of utility-scale PV technologies is down approximately 13% from last year and the mean levelized cost of energy of onshore wind has declined almost 7%. Lazard's latest annual Levelized Cost of Storage Analysis (LCOS 4.0) shows significant cost declines across most use cases and technologies, especially for



Lazard's latest LCOE shows the continued cost-competitiveness of certain renewable energy technologies, and the marginal cost of coal, nuclear, and combined-cycle gas generation. Levelized Cost of Storage: Version 8.0. The central findings of our LCOS analysis reinforce what we observe across the Power, Energy & Infrastructure Industry

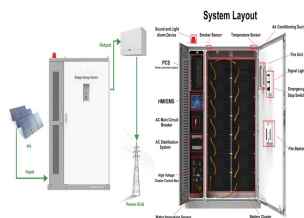


II LAZARD's LEVELIZED COST OF STORAGE ANALYSIS???VERSION 8.0. 15: III LAZARD's LEVELIZED COST OF HYDROGEN ANALYSIS???VERSION 3.0. 24: APPENDIX . A Maturing Technologies: 29. 1 Carbon Capture & Storage Systems: 30. 2 Long Duration Energy Storage: 33. B LCOE v16.0: 36. C LCOS v8.0: 41. D LCOH v3.0: 43. APRIL 2023.



potentially disruptive role of hydrogen across a variety of economic sectors. Our LCOH builds upon, and relates to, our annual Levelized Cost of Energy ("LCOE") and Levelized Cost of Storage ("LCOS") studies. Given this breadth, we have decided to focus the analysis on the following key topics:

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Lazard Releases Annual Levelized Cost of Energy and Levelized Cost of Storage Analyses October 19, 2020 NEW YORK --(BUSINESS WIRE)--Oct. 19, 2020--Lazard Ltd (NYSE: LAZ) has released its annual in-depth studies comparing the costs of energy from various generation technologies and the costs of energy storage technologies for different applications.



Lazard's Levelized Cost of Storage Analysis???Version 3.0 . The central findings of our LCOS analysis include: 1) selected energy storage technologies are establish a cycle in which energy storage cost declines facilitate wider deployment of Alternative Energy technology, creating more demand for, and spurring further



LAZARD RELEASES ANNUAL LEVELIZED COST OF ENERGY . AND LEVELIZED COST OF STORAGE ANALYSES . NEW YORK, November 8, 2018??? Lazard Ltd (NYSE: LAZ) has released its annual indepth studies - comparing the costs of energy from various generation technologies and of energy storage technologies for different applications.



Lazard's 2023 LCOE+ report analyzes the levelized costs of energy from various generation technologies, energy storage technologies and hydrogen production methods. Click below to read our 2023 findings. 2023 Levelized Cost Of Energy+



Levelized Cost of Storage. Lazard's latest annual Levelized Cost of Storage Analysis (LCOS 7.0) shows that year-over-year changes in the cost of storage are mixed across use cases and technologies, driven in part by the confluence of emerging supply chain constraints and shifting preferences in battery chemistry. Additional highlights from

ARUBA LEVELIZED COST OF STORAGE LAZARD



Lazard's latest LCOE shows the continued cost-competitiveness of certain renewable energy technologies, and the marginal cost of coal, nuclear, and combined-cycle gas generation. Levelized Cost of Storage: Version 8.0. ???



Lazard's Levelized Cost of Energy ("LCOE") analysis addresses the following topics: High end incorporates 90% carbon capture and storage. Does not include cost of transportation and storage. (7) Represents the LCOE of the observed high case gas combined cycle inputs using a 20% blend of "Blue" hydrogen, (i.e., hydrogen produced



Lazard's latest annual Levelized Cost of Energy Analysis (LCOE 14.0) shows that as the cost of renewable energy continues to decline, certain technologies (e.g., onshore wind and utility-scale solar), which became cost-competitive with conventional generation several years ago on a new-build basis, continue to maintain competitiveness with the marginal cost of selected existing ???