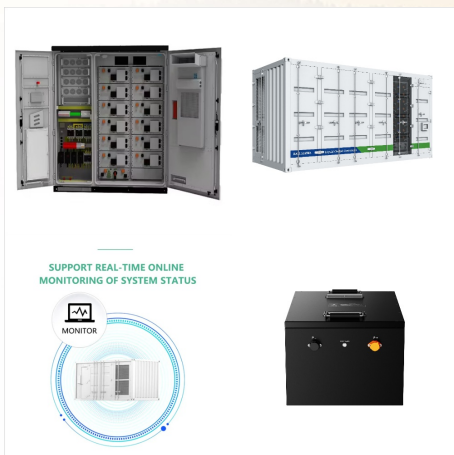




Recognizing the cost barrier to widespread LDES deployments, the United States Department of Energy (DOE) established the Long Duration Storage Shot in 2021 to achieve 90% cost reduction by 2030 for technologies that can provide 10+ ???



? Long-duration energy storage (LDES) is a key resource in enabling zero-emissions electricity grids but its role within different types of grids is not well understood. Using the Switch capacity

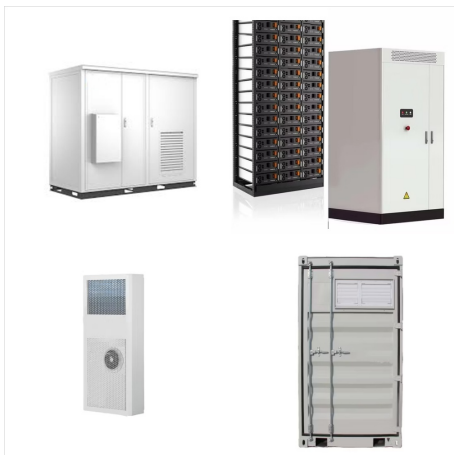


Long Duration Storage Shot. \$0.05/ kWh Levelized Cost of Storage. What RD& D Pathways get us to the 2030 Long Duration Storage Shot? DOE, 2022 Grid Energy Storage Technology Cost and Performance Assessment, August 2022. Solution: Storage Innovations 2030 Strategy.

LONG-TERM ENERGY STORAGE EXAMPLES



This study reviews current uses of energy storage and how those uses are changing in response to emerging grid needs, then assesses how the power generation industry and academia are defining long-duration storage and organizing research efforts to develop commercial technologies.



As the world transitions to decarbonized energy systems, emerging long-duration energy storage technologies will be critical for supporting the widescale deployment of renewable energy sources.



Long Duration Energy Storage (LDES) is a key option to provide flexibility and reliability in a future decarbonized power system. LDES includes several technologies that store energy over long periods for future dispatch.

LONG-TERM ENERGY STORAGE EXAMPLES



Exploring different scenarios and variables in the storage design space, researchers find the parameter combinations for innovative, low-cost long-duration energy storage to potentially make a large impact in a more affordable and reliable energy transition.