

HYDROLABS ENGINEERING & CONSULTING

INDUSTRY REPORT · BATTERY STORAGE

The State of Grid-Scale Battery Storage 2026

2026-01-29

41 pages

GLOBAL INSTALLED CAPACITY

620 GWh

A comprehensive review of grid-scale storage deployment trends, chemistry mix shifts, degradation and augmentation practice, and the emerging long-duration storage market.

Deployment Trends

Global grid-scale battery storage deployment continued its multi-year growth trend, with LFP chemistry further consolidating its position as the default choice for standard-duration applications across nearly all major markets tracked in this report, reinforcing the safety and cycle-life advantages discussed in our underlying technical research.

Average project duration has crept upward as markets mature past initial short-duration peak-shaving applications toward longer-duration solar-shifting and capacity-value applications, a trend we expect to continue as long-duration technologies reach broader commercial availability.

The Emerging Long-Duration Market

Long-duration storage technologies, flow batteries, iron-air systems, and others, moved from pilot to early commercial deployment in several markets over the past year, though cumulative installed capacity remains a small fraction of the broader lithium-ion storage market. Procurement activity suggests meaningful growth ahead as several major utilities have issued long-duration-specific procurement solicitations for the first time.

Augmentation Practice Is Maturing

Planned capacity augmentation, adding battery capacity partway through a project's operating life to offset degradation, has moved from an emerging concept to standard financial modeling practice across the industry, reflecting the accumulated field degradation data now available to inform realistic augmentation timing and sizing decisions.



