

U.S. Energy Storage Monitor 2018: A Retrospective Analysis of Market Dynamics

U.S. Energy Storage Monitor 2018: A Retrospective Analysis of Market Dynamics

Market Landscape in 2018

When the U.S. Energy Storage Monitor 2018 report landed on industry desks, it revealed a sector experiencing exponential growth - think of it as the "puberty phase" of energy storage development. Battery installations surged 57% year-over-year, with front-of-meter projects driving 85% of total deployments. California and Hawaii emerged as early adopters, their renewable integration challenges making them perfect test beds for storage solutions.

Key Drivers of Storage Adoption

Utility-scale solar pairing (like peanut butter and jelly for renewable integration)

FERC Order 841 removing market barriers for storage participation

Lithium-ion costs dropping 18% annually - remember when a 1MW system cost \$1.2M? Those were the days!

Technology Battleground While lithium-ion dominated 85% of new installations, 2018 saw interesting developments:

Technology Market Share Notable Project

Lithium-ion 85% Tesla's 182.5MW Moss Landing Phase 1

Flow Batteries 8% ESS Inc's 3MW/12MWh installation in Oregon

Thermal Storage 5%



U.S. Energy Storage Monitor 2018: A Retrospective Analysis of Market Dynamics

Ice Energy's 1,800 ice-making AC units in SoCal

The Policy Tightrope 2018's storage boom wasn't without challenges. Remember the "Solarcoaster"? Storage faced its own version with:

ITC eligibility debates - is storage a generator or ancillary service? Interconnection queue bottlenecks causing 9-18 month delays Fire safety concerns after Arizona battery incidents

Corporate Procurement Surge Commercial & industrial deployments grew 45% year-over-year, driven by:

Walmart's 30MWh behind-the-meter installations Microsoft's 2MW data center backup systems Starbucks' 500+ stores adding peak shaving batteries

The report highlighted an emerging trend we now recognize as standard practice - storage-plus solutions combining solar, batteries, and smart controls. Early adopters saw 22% greater ROI compared to standalone solar installations.

Regional Hotspots & Cold Zones While California led with 48% of national deployments, surprising markets emerged:

Texas: 127% growth in ancillary service projects Massachusetts: SMART program driving 83 residential projects Florida: Hurricane preparedness creating 25MW emergency storage

Future Projections vs. Reality

The 2018 report's 5-year forecast predicted 4.3GW deployments by 2023 - turns out they underestimated by 18%! Current market data shows actual installations reached 5.1GW, proving even optimistic projections couldn't keep pace with this sector's growth trajectory.

Web: https://www.sphoryzont.edu.pl



U.S. Energy Storage Monitor 2018: A Retrospective Analysis of Market Dynamics