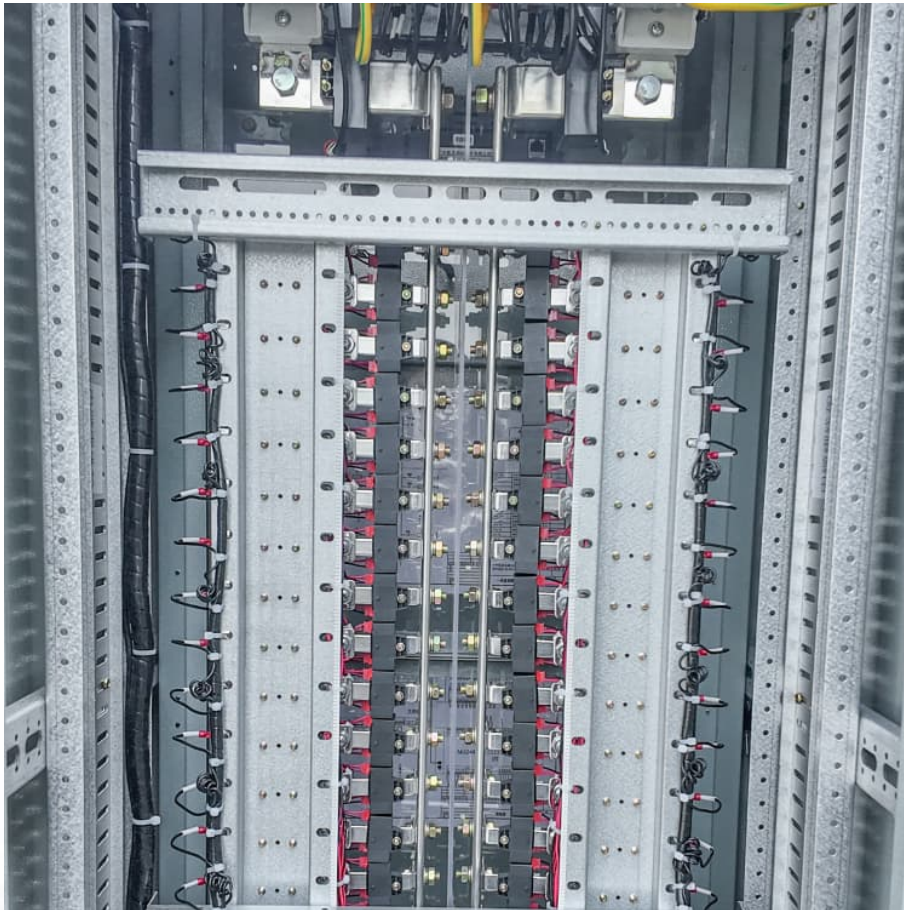


# **Energy storage industry statistical standards**





## Overview

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Does industry need standards for energy storage?

As cited in the DOE OE ES Program Plan, “Industry requires specifications of standards for characterizing the performance of energy storage under grid conditions and for modeling behavior. Discussions with industry professionals indicate a significant need for standards . ” [1, p. 30].

Are energy storage systems compliant?

Energy storage systems continue to be a rapidly evolving industry. Thus, the key to safe and up-to-date compliance requirements involves the adoption and application of codes and standards in addition to the development or writing of codes and standards.

How are energy storage systems regulated?

In some contexts, for energy storage systems, compliance regulations take the form of a state adopting a code, which then references and requires testing and listing or adherence to a standard. Some cities, counties, and special administrative districts (e.g., school or sewer districts) also adopt locally amended codes for their environments.

What is the growth rate of industrial energy storage?

The majority of the growth is due to forklifts (8% CAGR). UPS and data centers show moderate growth (4% CAGR) and telecom backup battery demand shows the lowest growth level (2% CAGR) through 2030. Figure 8. Projected global industrial energy storage deployments by application.

What are the different types of energy storage technologies?

Pumped hydro, batteries, hydrogen, and thermal storage are a few of the technologies currently in the spotlight. The global battery industry has been gaining momentum over the last few years, and investments in battery storage and power grids surpassed 450 billion U.S. dollars in 2024. Find the



latest statistics and facts on energy storage.

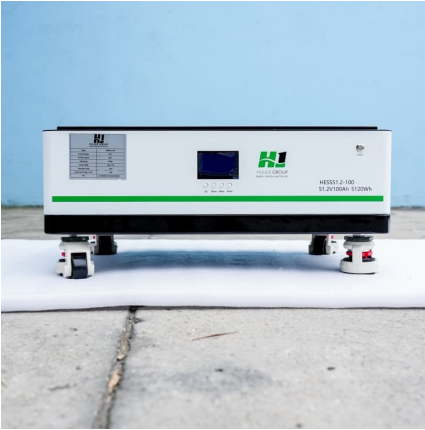
Why is the energy storage industry growing?

The U.S. energy storage industry has been observing remarkable growth due to increasing demand for efficient battery storage from different sectors such as EV, renewable energy and many more. This is pushing numerous innovative initiations in the industry. Solid-state batteries, gravity-based ESS are some of the innovations in the field.



## Energy storage industry statistical standards

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### Energy Storage Grand Challenge Energy Storage Market ...

This report, supported by the U.S. Department of Energy's Energy Storage Grand Challenge, summarizes current status and market projections for the global deployment of selected energy ...

### [Claims vs. Facts: Energy Storage Safety , ACP](#)

Utility-scale battery energy storage is safe and highly regulated, growing safer as technology advances and as regulations adopt the most up-to-date safety ...



### [US Energy Storage Market Size & Industry Trends 2030](#)

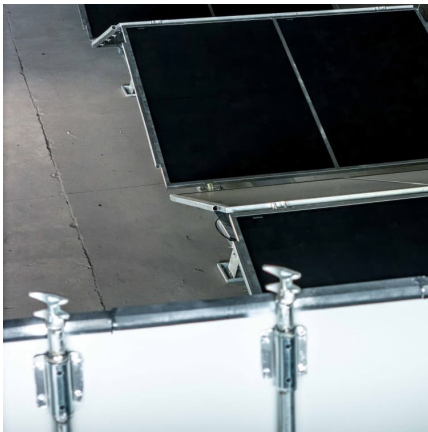
Energy storage is the capture of energy produced at one time for use at a later time to reduce imbalances between energy demand and energy ...

### 2025-Data-Center-Energy-Storage-Industry-Insights-Report

Conducted by Endeavor Business Intelligence on behalf of ZincFive, this report presents insights from 132 global industry professionals,



examining current usage trends, key ...



### [U.S. Energy Storage Market Size, Forecast 2025-2034](#)

Energy storage systems are widely used as EV battery storage systems such as lithium ion batteries. Additionally, EV sales in U.S. is rising due to the political ...

### Microsoft Word

In the energy storage system industry, an example of this code and standard relationship is the NFPA 1 Fire Code requiring that energy storage systems of certain sizes and in certain ...



### Battery Storage Industry Unveils National Blueprint for ...

The energy storage industry is committed to acting swiftly, in partnership with fire departments, safety experts, policymakers, and regulators ...





## Energy Statistics

The International Recommendations for Energy Statistics provide data compilers with a complete set of recommendations covering all aspects of the statistical production process, from basic ...



## [Battery Energy Storage Systems Report](#)

This information was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any of their employees, ...

## Summary of Global Energy Storage Market Tracking (Q2 2023)

Pumped hydro accounted for less than 70% for the first time, and the cumulative installed capacity of new energy storage(i.e. non-pumped hydro ES) exceeded 20GW. ...



## BATTERY STORAGE FIRE SAFETY ROADMAP

The research topics identified in this roadmap should be addressed to increase battery energy storage system (BESS) safety and reliability. The roadmap processes the findings and lessons ...



### Energy Storage Grand Challenge Energy Storage Market ...

Foreword As part of the U.S. Department of Energy's (DOE's) Energy Storage Grand Challenge (ESGC), DOE intends to synthesize and disseminate best-available energy storage data, ...



### U.S. Energy Storage Market Size, Forecast 2025-2034

The U.S. energy storage market size crossed USD 106.7 billion in 2024 and is expected to grow at a CAGR of 29.1% from 2025 to 2034, driven by increased ...



### Storage Futures , Energy Systems Analysis , NREL

Through the SFS, NREL analyzed the potentially fundamental role of energy storage in maintaining a resilient, flexible, and low carbon U.S. ...



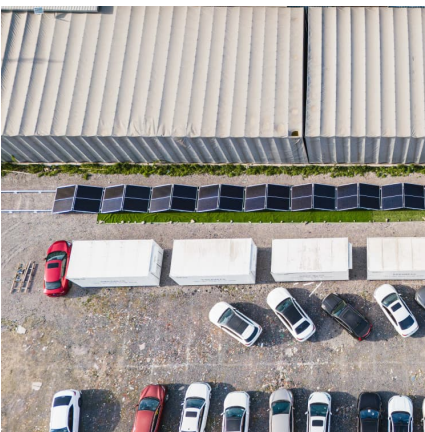
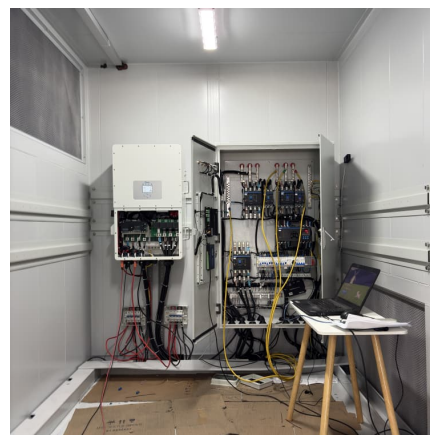


### [U.S. Codes and Standards for Battery Energy Storage ...](#)

This document provides an overview of current codes and standards (C+S) applicable to U.S. installations of utility-scale battery energy storage systems. ...

### Microsoft Word

1.0 Introduction The Infrastructure Investment and Jobs Act (H.R. 3684, 2021) directed the Secretary of Energy to prepare a report identifying the existing codes and standards for energy ...



### Review of Codes and Standards for Energy Storage Systems

One of the Energy Storage Partnership partners in this working group, the National Renewable Energy Laboratory, has moved forward to collect and analyze information about the existing ...

### [Energy storage market size worldwide 2031. Statista](#)

The global energy storage system market is forecast to grow steadily between 2024 and 2031 with a compound annual growth rate of approximately \*\*\*\* percent.



### Energy Storage Statistics 2023: Key Trends and Industry Insights

As the world accelerates its transition toward renewable energy sources, energy storage has become a pivotal element in achieving a sustainable, reliable, and resilient power ...

### Technology Strategy Assessment

This report involved significant engagement with subject matter experts and others who are familiar with supercapacitors and energy storage more broadly. Thank you to all of the industry, ...



### [Claims vs. Facts: Energy Storage Safety . ACP](#)

Utility-scale battery energy storage is safe and highly regulated, growing safer as technology advances and as regulations adopt the most up-to-date safety standards.



### [Energy storage safety and growth outlook in 2025](#)

The energy storage industry's trajectory in recent years has been nothing short of remarkable, driven by increased customer recognition of ...



### [Summary of Global Energy Storage Market Tracking ...](#)

Pumped hydro accounted for less than 70% for the first time, and the cumulative installed capacity of new energy storage(i.e. non-pumped ...

### [Storage Futures , Energy Systems Analysis , NREL](#)

Through the SFS, NREL analyzed the potentially fundamental role of energy storage in maintaining a resilient, flexible, and low carbon U.S. power grid through the year ...



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