

## SolarTech Power Solutions

# The price of discharging into energy storage batteries



## Overview

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Around the beginning of this year, BloombergNEF (BNEF) released its annual Battery Storage System Cost Survey, which found that global average turnkey energy storage system prices had fallen 40% from 2023 numbers to US\$165/kWh in 2024. This was the biggest drop since BNEF began its surveys in 2017.

The price is the expected installed capital cost of an energy storage system. Because the capital cost of these systems will vary depending on the power (kW) and energy (kWh) rating of the system, a range of system prices is provided. 2. Evolving System Prices It is often difficult to obtain.

How much is the energy storage charge and discharge loss?

The cost associated with energy storage charge and discharge loss can fluctuate considerably based on various factors affecting the efficiency and viability of energy storage systems. 1. Charge and discharge losses can range from 10% to 30%.

In 2025, you're looking at an average cost of about \$152 per kilowatt-hour (kWh) for lithium-ion battery packs, which represents a 7% increase since

2021. Energy storage systems (ESS) for four-hour durations exceed \$300/kWh, marking the first price hike since 2017, largely driven by escalating raw.

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