



Lowest cost per kwh battery

Lowest cost per kwh battery

The price of lithium-ion battery packs has dropped 14% to a record low of \$139/kWh, according to analysis by research provider BloombergNEF (BNEF). This was driven by raw material and component prices falling as production capacity increased across all parts of the battery value chain, while demand growth fell short of some industry expectations.

For battery electric vehicle (BEV) packs, prices were \$128/kWh on a volume-weighted average basis in 2023. At the cell level, average prices for BEVs were just \$89/kWh.

Our researchers forecast that average battery prices could fall towards \$80/kWh by 2026, amounting to a drop of almost 50% from 2023, a level at which battery electric vehicles would achieve ownership cost parity with gasoline-fueled cars in the US on an unsubsidized basis.

After a difficult couple of years which saw the trend of falling lithium battery prices temporarily reverse, a 14% drop in lithium-ion (Li-ion) battery pack cost from 2022-2023 has been recorded by BloombergNEF.

The market research and analysis group has published the new edition of its annual survey of battery pricing, finding that prices have been falling again this year after "unprecedented price increases" in 2022.

Meanwhile, demand for batteries across the electric vehicle (EV) and battery energy storage system (BESS) markets will likely total 950GWh globally in 2023, according to BloombergNEF.

On average, pack prices fell 14% from 2022 levels to a record low of US\$139/kWh this year. This reduction was driven by the dynamics of falling raw material and component prices, and increases in production capacity.

However, despite the good news, BloombergNEF (BNEF) no longer expects to find average pack prices fall below US\$100/kWh by 2024 (as it predicted in 2020), nor by 2026 (as it predicted last year). It will however be likely to happen before the end of this decade, with BNEF forecasting that the average pack will cost about US\$113/kWh in 2025, and decline in cost sharply to around US\$80/kWh by 2030.

Perhaps unsurprisingly, the cheapest battery packs are to be found in China, given the country's massive scale of manufacturing and involvement across the whole value chain from materials processing to finished products, as well as its early adopter advantage in terms of tech development and knowhow.

Packs in China were found to be at an average of US\$126/kWh while packs made in the US and Europe were 11% and 26% higher respectively. With both the US and Europe battling to become significant players in the battery value chain, the higher prices reflects the relative immaturity of their industries, as well as the fact that



Lowest cost per kwh battery

China's many manufacturers are now competing with each other on price, BNEF said.

In May, commodity price reporting agency Fastmarkets said that it expected nickel manganese cobalt (NMC) Li-ion battery pack prices to fall below US\$100/kWh in 2027, and lower-cost lithium iron phosphate (LFP) packs to hit the sub-US\$100 threshold even sooner, by 2025.

Again, Fastmarkets noted that those price points could be hit quicker in China, while Fastmarkets Battery Raw Materials Analyst Jordan Roberts said lithium carbonate prices would remain elevated over 2023, but wouldn't go back up to the peak prices seen last year.

Contact us for free full report

Web: <https://hollanddutchtours.nl/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

