

Average sodium ion battery storage price per 5kWh in Finland





Overview

Finland's robust commitment to sustainability and clean energy offers a favorable environment for the development of sodium ion technology, which is viewed as a promising alternative to lithium-ion batteries due to its abundance and lower environmental impact.

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BroadBit is a technology company focused on developing innovative sodium-based batteries that aim to enhance the future green economy. Their groundbreaking approach to sodium-ion battery technology positions them as a leader in the next generation of sustainable energy solutions. Broadbit Batteries.

The average cost for sodium-ion cells in 2024 is \$87 per kilowatt-hour (kWh), marginally cheaper than lithium-ion cells at \$89/kWh. Assuming a similar capex cost to Li-ion-based battery energy storage systems (BESS) at \$300/kWh, sodium-ion batteries' 57% improvement rate will see them increasingly.

Over the past three years, Finland's energy storage market has grown faster than a Helsinki startup – jumping from €180 million in 2021 to an estimated €320 million in 2024. But here's the kicker: module prices dropped 12% during the same period. How's that possible?

Let's unpack this paradox.

The Finland Battery Energy Storage Market is projected to witness mixed growth rate patterns during 2025 to 2029. The growth rate starts at 0.61% in 2025 and reaches 2.85% by 2029. The Battery Energy Storage market in Finland is projected to grow at a stable growth rate of 0.35% by 2027, within the.



Especially the solid state batteries, are also expected to be advances further and used as a new material such as sodium ion which is expected to be low in price and high in performance. The Storage Development baselines will make cost effective improvement bringing about benefits to the energy. How much will sodium ion batteries cost in 2028?

Assuming a similar capex cost to Li-ion-based battery energy storage systems (BESS) at \$300/kWh, sodium-ion batteries' 57% improvement rate will see them increasingly more affordable than Li-ion cells, reaching around \$10/kWh by 2028.

Are sodium ion batteries a good investment?

Analysing 30 LDES technologies, the research found sodium-ion batteries to hold the most promise due to their fast improvement rate - around 57% in 2024. They offer more efficiency in round-trip energy use, greater operational flexibility and lose less energy during storage and supply.

Will sodium-ion batteries dominate the future of long-duration energy storage?

With costs fast declining, sodium-ion batteries look set to dominate the future of long-duration energy storage, finds AI-based analysis that predicts technological breakthroughs based on global patent data. Sodium-ion batteries' rapid development could see long-duration energy storage (LDES) enter mainstream use as early as 2027.

How much does a sodium ion cell cost in 2024?

The average cost for sodium-ion cells in 2024 is \$87 per kilowatt-hour (kWh), marginally cheaper than lithium-ion cells at \$89/kWh.

When will sodium ion batteries become mainstream?

Sodium-ion batteries are not only improving at a faster rate than other LDES technologies but they are also set to be cost comparable with the cheapest forms of dispatchable power, and therefore enter mainstream use, as early as 2027.

Will sodium-ion batteries disrupt the LDEs market?

Credit: Fahreni/Shutterstock. Sodium-ion batteries are set to disrupt the LDES market within the next few years, according to new research - exclusively seen by Power Technology's sister publication Energy Monitor - by GetFocus,



an AI-based analysis platform that predicts technological breakthroughs based on global patent data.



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EV Battery Costs in 2025: How Pricing is Changing the Market

EV battery costs have dropped from \$1,100 per kWh in 2010 to just \$130 per kWh in 2025! Find out how innovation, economies of scale, and new battery technologies are ...

[China announces procurement of sodium-ion batteries ...](#)

The innovative project located in a suburban district in the south of Shanghai will integrate five different energy storage technologies, including sodium-ion batteries. Its first phase will have a cumulative capacity of 40 ...



Finland sodium battery price

Na-ion cells are likely to come at a price premium initially, but IDTechEx expect a drop in cost/price in the short term through manufacturing efficiencies, scale, and technology ...

[Where are EV battery prices headed in 2025 and ...](#)

Lithium-ion (Li-ion) EV battery prices have decreased dramatically over the past few years, mainly due to the fall in prices of critical battery



metals: Lithium, cobalt and nickel. For example, the price of cobalt has fallen from roughly \$70,000 ...



Sodium Batteries to Disrupt Energy Storage Market by 2027

The average cost for sodium-ion cells in 2024 is \$87 per kilowatt-hour (kWh), slightly cheaper than Lithium-ion cells at \$89/kWh. Assuming similar capital expenditures, ...

[Top 10 Energy Storage Companies in Finland: A 2024 ...](#)

Especially the solid state batteries, are also expected to be advances further and used as a new material such as sodium ion which is expected to be low in price and high in performance.



[Grid-Scale Battery Storage: Frequently Asked Questions](#)

The current market for grid-scale battery storage in the United States and globally is dominated by lithium-ion chemistries (Figure 1). Due to technological innovations and improved ...



How does the cost of sodium-ion batteries compare to lithium-ion

The cost of sodium-ion batteries compared to lithium-ion batteries shows significant advantages in several real-world applications. Here's a breakdown of their cost ...



[Finland energy storage battery price list](#)

Unique and productized energy storage systems and solutions for customer-specific needs, from design to commissioning. energy storage services allow properties or industrial buildings to ...

[Residential Battery Storage , Electricity , 2024 , ATB](#)

Where P_B = battery power capacity (kW), E_B = battery energy storage capacity (\$/kWh), and c_i = constants specific to each future year. Capital Expenditures (CAPEX) Definition: The bottom-up cost model documented by (Ramasamy et ...



[Average Solar Battery Prices , Updated Quarterly](#)

Average installed solar battery prices - August 2025 The table below displays average, indicative battery installation prices from a range of installers around Australia, most of whom are active in the Solar Choice ...



What Does Green Energy Storage Cost in 2025?

The average price of lithium-ion battery packs stands at \$152 per kilowatt-hour (kWh), reflecting a 7% increase since 2021. This rise, albeit slight from 2022's \$151/kWh, underscores the ongoing challenges in battery storage economics.



Manufacturing & Regional Cost Competitiveness of ...

With sodium ion cells reaching commercialization, this thesis would like to explore the viability of commercial sodium ion cells through a bottom-up manufacturing and regional cost analysis of ...

Exclusive: sodium batteries to disrupt energy storage ...

The average cost for sodium-ion cells in 2024 is \$87 per kilowatt-hour (kWh), marginally cheaper than lithium-ion cells at \$89/kWh. Assuming a similar capex cost to Li-ion-based battery energy storage systems (BESS) at ...





[Grid-Scale Battery Storage: Costs, Value, and](#)

Motivation and Context Li-ion battery pack prices have dropped by 80-90% since 2010 Worldwide installation of batteries is expected to increase rapidly - from ~9 GW (17 GWh) in 2018 to ...

Finland sodium battery price

However, sodium-ion battery production is growing and is projected to reach 140 gigawatt-hours by 2030, about 13 times its current level, according to Benchmark. Lithium-ion production also ...



[Battery energy storage system prices in finland](#)

Recent projections indicate that average cell prices for stationary storage systems, currently at USD 110.00/kWh, may experience a spike to USD 135.00/kWh in 2025 before stabilizing at ...



[Sodium-ion Batteries 2025-2035: Technology, ...](#)

Sodium-ion Batteries 2025-2035 provides a comprehensive overview of the sodium-ion battery market, players, and technology trends. Battery benchmarking, material and cost analysis, key player patents, and 10 year ...



[Battery price per kwh 2025, Statista](#)

The cost of lithium-ion batteries per kWh decreased by 20 percent between 2023 and 2024. Lithium-ion battery price was about 115 U.S. dollars per kWh in 202.



Cost Projections for Utility-Scale Battery Storage: 2021 ...

Executive Summary In this work we describe the development of cost and performance projections for utility-scale lithium-ion battery systems, with a focus on 4-hour duration ...



Sodium-ion Battery price today , Historical New Energy Price ...

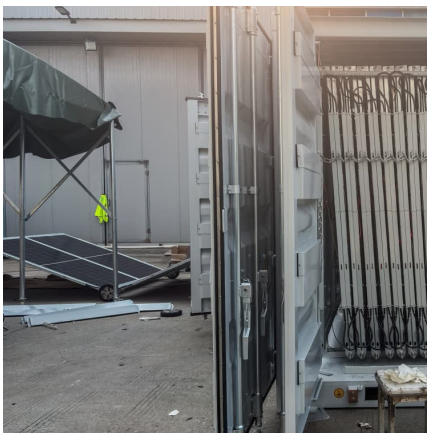
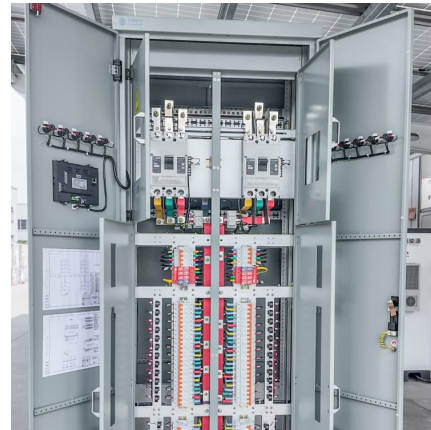
SMM brings you current and historical Sodium-ion Battery price tables and charts, and maintains daily Sodium-ion Battery price updates.





[Understanding the Cost Dynamics of Flow Batteries ...](#)

When it comes to renewable energy storage, flow batteries are a game-changer. They're scalable, long-lasting, and offer the potential for cheaper, more efficient energy storage. But what's the real cost per kWh? Let's dive in. ...



Volta's 2024 Battery Report: Falling costs drive battery ...

The 500 page report offers a full picture of the battery industry, including a deep focus on battery energy storage systems (BESS).

Battery storage and renewables: costs and markets to 2030

Wider deployment and the commercialisation of new battery storage technologies has led to rapid cost reductions, notably for lithium-ion batteries, but also for high-temperature sodium-sulphur ...



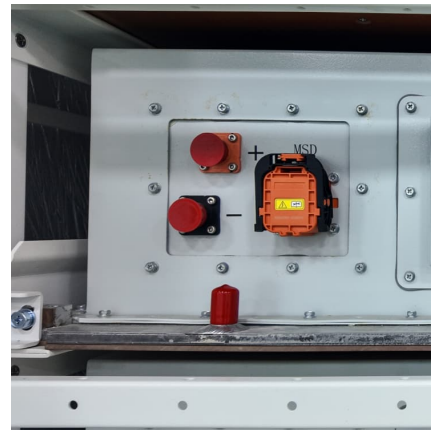
[Ten GWh of sodium-ion batteries expected to be ...](#)

A recent report by IDTechEx predicts that by 2025, around 10 GWh of sodium-ion batteries will be installed as significant manufacturing capacities come online and existing lithium-ion lines are



[Prices of Lithium Batteries: A Comprehensive Analysis](#)

Lithium battery prices fluctuate due to raw material costs (e.g., lithium, cobalt), manufacturing innovations, geopolitical factors, and demand surges from EVs and renewable ...



[The Electric: Sodium Ion Batteries Only Seem ...](#)

In a drive to cut costs and their reliance on China's supply chain, Western startups have been developing batteries using cheap and abundant sodium in place of lithium, today's standard. But an extended plunge ...



Sodium-Ion Battery Price Trends: A Comprehensive Guide for 2023

Understanding Sodium-Ion Battery Pricing
Sodium-ion batteries are becoming increasingly competitive in the energy storage market. As reported by [poweringautos](#), the ...





Sodium-ion batteries ready for commercialisation: for ...

The cost of a Na-ion battery cell is expected to be around \$40-80/kWh compared to an average of \$120/kWh for a Li-ion cell. Na-ion batteries are safer (operating temperature range, stability), and have faster charging ...

Finland Energy Storage Module Price Trend: What Buyers Need ...

Ever wondered why Finland energy storage module prices are making waves globally? Let's cut through the Nordic fog. Over the past three years, Finland's energy storage ...



[Costs of 1 MW Battery Storage Systems 1 MW / 1 ...](#)

The cost of a 1 MW battery storage system is influenced by a variety of factors, including battery technology, system size, and installation costs. While it's difficult to provide an exact price, industry estimates suggest a range ...

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