

### Global PV Energy Storage Information - Solar, Battery & Smart Grid Insights

# Successful bid price of sodium ion battery storage project in Canada 2025





#### **Overview**

Sodium-ion batteries have gained significant attention in 2025 as the push for cost-effective and sustainable energy storage solutions intensifies. This innovative battery technology is emerging as a viable contender against Lithium-ion batteries, offering both economic and environmental benefits.

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Lithium-ion's spectacular growth has exposed hard limits—price spikes for lithium and nickel, fire-safety worries, and a supply chain concentrated in just a few countries. Sodium is  $500 \times \text{more abundant than lithium and costs}$  pennies per kilogram at commodity scale. Swapping copper current.

The global sodium ion battery market was valued at USD 270.1 Million in 2024 and is set to grow at a CAGR of 26.1% from 2025 to 2034. Rising demand for cost-effective sustainable solutions with reduced supply chain risk is set to boost product adoption. Growing adoption of environmentally friendly.

In February 2024, Kingshine cancelled its proposed 6 GWh sodium-ion battery facility in Jiangxi Province. Likewise, Veken Tech has postponed its 2 GWh project, originally set for completion in December 2024, now rescheduled to begin operations in December 2025. These setbacks underscore the ongoing.

The energy storage sodium ion battery market is projected to grow from USD 307.4 million in 2025 to USD 2,932.0 million by 2035, at a CAGR of 25.3%. Sodium sulfur battery will dominate with a 48.0% market share, while aqueous will lead the technology segment with a 65.0% share. The energy storage.



The Canada Sodium-ion Battery Market is projected to grow from USD 450 million in 2025 to USD 2.9 billion by 2031, at a CAGR of 35.2% during the forecast period. This rapid growth is driven by expanding applications in grid storage, increasing EV adoption, and technological advancements reducing. How big is the sodium ion battery market?

The global sodium ion battery market was valued at USD 270.1 Million in 2024 and is set to grow at a CAGR of 26.1% from 2025 to 2034. Rising demand for cost-effective sustainable solutions with reduced supply chain risk is set to boost product adoption.

Are sodium-ion batteries the future of energy storage?

Sodium-ion batteries are being leveraged across multiple industries. Utility companies are at the forefront of their deployment, as demonstrated by HiNa Battery's 100MWh energy storage project. These batteries provide an affordable alternative for renewable energy grid storage, helping stabilize energy supply.

Are sodium-ion batteries competitive?

As of 2025, sodium-ion batteries are well-positioned to achieve cost parity with lithium-iron-phosphate (LFP) batteries, a key milestone for market competitiveness. With ongoing innovations and substantial investments, their adoption in energy storage systems, renewable grids, and budget EVs is expected to soar in the coming years.

Who makes sodium ion batteries?

Some of the major players in the sodium ion battery industry include Altris, Broadbit Batteries, CATL, China BAK Battery, Farasis Energy, Faradion Limited, HiNa Battery Technology, Li-FUN Technology, Natron Energy, SVOLT, and Tiamat. How much sodium ion battery share captured by North America in 2024?

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Will sodium ion batteries increase energy density?

This company continues to progress in the development of sodium-ion batteries with the intent to increase energy density and market their solutions as substitutes for lithium-ion batteries. In December 2022, Svolt Energy unveiled its inaugural sodium-ion battery prototype, boasting an energy



density of 100 Wh/kg.

How much money is needed to improve sodium ion battery technology?

In December 2024, the U.S. DOE, in collaboration with the LENS Consortium supervised by Argonne National Laboratory, has announced an investment of USD 50 million over 5 years to improve sodium ion battery technology.



#### Successful bid price of sodium ion battery storage project in Canada



### Ontario Completes Largest Battery Storage ...

TORONTO - The Ontario government has concluded the largest battery storage procurement in Canada's history and secured the necessary electricity generation to support the province's growing population and ...

# Sodium-ion battery BREAKTHROUGH offers a faster, ...

In a world shackled by the limitations of lithiumion batteries -- fraught with scarcity, ethical dilemmas, and soaring costs -- a breakthrough emerges from the shadows. Researchers in India have unveiled a sodium-ion ...





#### Addressing Tariffs and Trade in Energy Storage Projects

Two major areas of international trade that will remain causes of concern for energy storage projects are the application of tariffs and supply chain integrity. While it remains to be seen what the US administration might impose ...

Sodium-ion batteries face uphill struggle to beat lithium-ion on ...



A new Stanford University study finds that there are several several key routes that sodium-ion battery developers can take to compete on price, specifically against a low ...





### The Race To Replace Lithium: Is Sodium the Future ...

The study also identifies market forces and supply chain conditions that could hurt sodiumion's competition with lithium-ion. For example, if lithium prices continue where they are today near historic lows, sodium-ion ...

#### Canada Sodium-ion Battery Market Size and Forecasts 2031

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### What's Currently Happening in Sodium-Ion Batteries? 2025

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#### Comprehensive review of **Sodium-Ion Batteries:** Principles, ...

Sodium-ion batteries have a significant advantage in terms of energy storage unit price compared to lithium-ion batteries. This costeffectiveness stems from the abundance and ...





#### Large-scale hybrid lithiumsodium-ion BESS comes online in China

The project in Yunnan, China. Image: HiNa Battery. A 200MW/400MWh BESS project in China combining lithium-ion and sodium-ion batteries has been put into operation. ...

#### China Debuts World's First Grid- MULTIPLE WORKING MODES Forming Sodium-Ion Battery **Plant**

China has officially launched the world's first gridforming Sodium-ion Battery energy storage facility. The Baochi Energy Storage Station, located in Yunnan province, comes ...

### **FLEXIBLE SETTING OF**



#### **Governments of Canada and Ontario Working Together to** Build ...

The governments of Canada and Ontario are working together to build the largest battery storage project in the country. The 250-megawatt (MW) Oneida Energy storage ...





#### Natron Energy Begins Sodium-Ion Battery Production ...

Natron Energy, a pioneer in Sodium-ion Battery technology, has officially commenced commercial-scale operations at its state-of-theart facility in Holland, Michigan. Sodium-ion batteries offer several advantages over ...





#### Cost Projections for Utility-Scale Battery Storage: 2023 ...

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 ...

### Enabling renewable energy with battery energy ...

These developments are propelling the market for battery energy storage systems (BESS). Battery storage is an essential enabler of renewable-energy generation, helping alternatives make a steady contribution to the ...







### Sodium Batteries Reach Industrial Explosion Point in ...

Sodium batteries are hitting their industrial explosion point in 2025! Discover the breakthroughs driving mass adoption in EVs, energy storage & beyond.

### Energy Storage Sodium Ion Battery Market, Size ...

The energy storage sodium ion battery market size crossed USD 245.3 million in 2024 and is set to grow at a CAGR of 25.3% from 2025 to 2034, driven by rising demand for safer, thermally stable batteries that reduce fire and explosion risks ...





### **Energy Storage Systems (ESS) Projects and Tenders**

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#### **SodiumBattery**

Empowering businesses with precision, safety, and intelligence, they aim to redefine energy storage and sustainably shape its future. E-Bike Manufacturer C partnered with SodiumBattery to create a custom, cost-effective, sustainable ...







### **Sodium-Ion Batteries for Stationary Energy Storage**

CATL has unveiled sodium-ion battery prototypes with improved energy densities exceeding 200 Wh/kg, aimed at both stationary storage and EV applications. Mass production is slated for 2025.

#### CATL to Produce Second-Generation Sodium-Ion ...

CATL has announced the second generation of its sodium-ion battery. According to Chief Scientist Wu Kai, it is set to hit the market in 2025, with mass production expected to begin in 2027.





### Stanford Study Highlights Sodium-Ion Battery Potential

Success will depend on achieving higher cell performance metrics. Systems-Level Success Industry leaders stress that success for battery technologies hinges on systems-level implementation. Though sodium-ion cell ...



### Solar, battery storage to lead new U.S. generating capacity

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Battery storage. In 2025, capacity growth from battery storage could set a record as we expect 18.2 GW of utility-scale battery storage to be added to the grid. U.S. battery storage already ...





# Government of Canada to partner with Frontier Lithium Inc. to ...

The PAK Lithium Project is a joint venture between Frontier Lithium and Japan's Mitsubishi, showcasing an opportunity for Canada to supply our allies with the critical minerals ...

### Canada's Largest Battery Project Powers Clean Future

Ontario's latest move saw the province finalize Canada's largest battery storage procurement, with the Oneida Energy Storage project as its centerpiece. Set to begin ...



#### Sodium-ion: The Three Big Promises of Sodium-Ion ...

Sodium-ion batteries are emerging as a compelling alternative to lithium-ion, offering a unique blend of material abundance, system compatibility, and enhanced safety. As the energy storage market searches for ...





# China Announces Sodium-Ion Battery Procurement at \$150/kWh

China has officially announced the procurement of sodium-ion batteries, setting a price ceiling at \$150/kWh. This exciting development comes alongside the construction of a ...





### Top 5 Largest Upcoming BESS Projects in the World ...

Discover the world's biggest battery storage projects of 2025, including BYD's 12.5 GWh system in Saudi Arabia, Grenergy's 11 GWh Atacama project, and more shaping the global energy transition.

### Natron Energy Begins Sodium-Ion Battery Production at Scale

Natron Energy, a pioneer in Sodium-ion Battery technology, has officially commenced commercial-scale operations at its state-of-theart facility in Holland, Michigan. ...







#### **NEXGENNA - The next** generation in sodium-ion batteries

The Faraday Institution 's Nexgenna project will accelerate the development of sodium-ion battery technology by taking a multi-disciplinary approach incorporating fundamental chemistry right ...

### Exclusive: sodium batteries to disrupt energy storage ...

With costs fast declining, sodium-ion batteries look set to dominate the future of long duration energy storage, finds an Al-based analysis that predicts technological breakthroughs based on global patent data.



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