What is a Northvolt sodium ion battery?

Stockholm, Sweden - Northvolt today announced a state-of-the-art sodium-ion battery, developed for the expansion of cost-efficient and sustainable energy storage systems worldwide.

What is a sodium ion battery?

The cell has been validated for an energy density of more than 160 Wh/kg and is designed primarily for energy storage applications. Northvolt, Europe's battery manufacturing torchbearer, has announced the development of its first-generation sodium-ion battery cells.

How much energy does a sodium ion battery use?

Northvolt said on Tuesday that it had now validated a sodium-ion battery at the critical level of 160 watt hours per kilogramme, an energy density close to that of the type of lithium batteries typically used in energy storage.

What is an example of a battery based on sodium?

One example is batteries based on sodium. Until a year ago, it was mostly lithium; now we know that sodium can play a role." Northvolt's current sodium-ion batteries are designed for use in energy storage, but subsequent generations with higher energy density could eventually be used in electric vehicles.

Why is sodium ion a good choice for energy storage?

Peter Carlsson concludes: "Our sodium-ion technology delivers the performance required to enable energy storage with longer duration than alternative battery chemistries, at a lower cost, thereby opening new pathways to deploying renewable power generation.

What is sodium ion technology?

The sodium-ion technology, which has been developed together with research partner Altris, is intended to provide the foundation for Northvolt's next-generation energy storage solutions.





Sodium-Based Batteries: The Next Revolution in Energy Storage; Sodium-Ion Battery Market Growth Forecast to 2030; Sodium-Ion Battery Market Growth and Trends; Sweden's Innovative Sodium-Ion Battery: A Step Towards Energy Independence; Advancing Sodium Ion Batteries: UCLA's STORE Center Initiative



Maximize Performance with the Victron Multiplus II. Pair this battery with the CEC-approved Victron Multiplus II 48/5000 to unlock its full potential. The Victron inverter's wide voltage range of 66V to 38V ensures you can access over 75% ???



Ingrid Capacity has partnered with Locus Energy to install 196 MW of battery storage across 13 sites in southern Sweden, with plans to reach 8 GW of storage capacity in Europe by 2030. This partnership builds on previous projects totaling 211 MW, solidifying Ingrid's role in transforming Europe's energy storage landscape.





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The company is in the process of launching a sodium ion battery for electrochemical energy storage and transportation in Q3 2022. It is working with Faradion, a sodium ion battery producer, to boost its manufacturing and sales ???





The sodium-ion battery cell has a "best-in-class" energy density of over 160 Wh/kg and was made without the use of lithium, nickel, cobalt, or graphite, as stated in the company's official press ???



TDK Ventures Invests in Peak Energy for Sodium-Ion Energy Storage Solutions; Sodium Ion Battery Market to Hit \$1.2 Billion by 2031; Encorp and Natron Energy Unveil First Hybrid Power Platform; Reliance Industries Unveils Removable Energy Storage Battery; Revolutionizing Grid-Scale Battery Storage with Sodium-Ion Technology



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Natron Energy to build gigawatt-scale sodium-ion battery plant in North Carolina The new planned manufacturing facility will produce 24 GW of Natron's sodium-ion batteries annually. Natron says its batteries outperform lithium-ion batteries in power density and recharging speed, do not require lithium, cobalt, copper, or nickel, and are non



Sweden's Sodium-ion Battery Innovation. Europe's energy and electric vehicle sectors could lessen their reliance on China with the introduction of a groundbreaking Sodium-ion Battery by Swedish company Northvolt. This ???





14 large-scale battery storage systems (BESS) have come online in Sweden to deploy 211 MW / 211 MWh into the region. Developer and optimiser Ingrid Capacity and energy storage owner-operator BW ESS have ???



The Chinese battery maker broke ground on a 30 GWh sodium-ion battery factory earlier this year. The product has a power output of 1,155 kW and a storage capacity of 2.3 MWh. Its nominal voltage stands at 1,200 V, and the voltage range spans from 800 V??? 1,400 V. sodium-ion battery cell, installation-free home microgrid A trifecta of



2 ? [Lithium Battery Companies Face Obstacles in Going Global! Putailai's 100,000 mt Anode Material Investment in Sweden Rejected, Plans to Appeal] ?? Putailai is expected to terminate the implementation of the 100,000 mt integrated anode material production site project in Sweden; ??? The company cannot fully agree with the conditions proposed by the Swedish ???





For Hughes, of battery consultancy Rho Motion, Northvolt is well placed to bring its sodium-ion storage batteries into large-scale factory production. The company has received billions in funding from investors such ???



Sweden's Sodium-ion Battery Innovation. Europe's energy and electric vehicle sectors could lessen their reliance on China with the introduction of a groundbreaking Sodium-ion Battery by Swedish company Northvolt. This new battery, which boasts an energy density over 160 watt-hours per kilogram, is a sustainable alternative that avoids lithium, nickel, graphite, ???



Altris reaches new milestone with 160 Wh/kg battery cell. The Swedish sodium-ion battery developer Altris presents a sodium-ion battery cell that has been validated for a best-in-class energy density of over 160 Wh/kg. This makes Altris" battery cell commercially viable for applications such as cost-efficient and sustainable energy storage





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Sodium-ion batteries are emerging as a potential alternative to Lithium-ion batteries, which have been the dominant force in energy storage for decades.. Sodium-Ion Batteries: An Emerging Trend. Sodium-ion batteries have recently garnered attention in the energy storage industry. Researchers have been exploring alternatives to Lithium-ion batteries ???





HiNa Battery Technology Co., Ltd is a Chinese company focused on the development and production of a new generation of energy storage systems: sodium-ion batteries. The company recently unveiled three sodium-ion battery cell products with energy densities ranging from 140 Wh/kg to 155 Wh/kg.



Altris, Stora Enso to develop sodium-ion anode from lignin Swedish sodium-ion battery specialist Altris has partnered with Stora Enso, Finish-Swedish cellulose and paper maker, to drive the adaptation of the corporation's hard carbon solution Lignode as an anode material in its sodium-ion battery cells.



At this year's UN Climate Conference in Dubai, COP28, Northvolt CEO and Co-Founder Peter Carlsson presented an outlook on sodium-ion, and in a conversation with Anna Liberg, Global Head of Energy at Business Sweden, detailed how Northvolt came to embrace the technology, the breakthroughs enabling its use and the profound opportunities that would arise ???

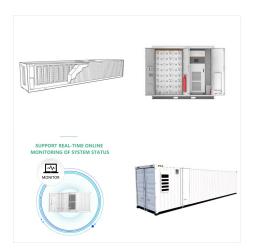




Swedish start-up Northvolt announced on Tuesday a breakthrough in its sodium-ion battery technology, developed for use in energy storage systems. The battery does not involve the use of lithium, cobalt or ???



The demand for more sustainable and cost-effective energy storage solutions has led to the exploration of alternate battery technologies for electric bikes (e-bikes). Sodium-ion batteries are emerging as an impressive alternative to the conventionally used lithium-ion batteries. They leverage abundant sodium resources,



Sodium batteries have a lower incidence of battery fires than conventional lithium batteries. The official energy density of the new sodium-ion battery has not been reported ??? however, CATL said it aims to exceed 200Wh/kg. Although the battery should launch in 2025, mass production is unlikely until 2027.