

What role do batteries play in the future of energy supply?

In order for us to continue using electricity when we want, rather than when the most electricity is produced, it must be stored. Therefore, batteries play a significant role in the future of energy supply. There are several innovative Swedish companies in the battery field, and one of the most successful is Northvolt.

How much is Northvolt's new energy storage technology worth?

Peter Carlsson, Northvolt's chief executive and co-founder, told the Financial Times that the new technology could be worth tens of billions of dollars as it opens up regions such as the Middle East, Africa and India for battery-powered energy storage for the Swedish group.

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."

Are sodium-based batteries a solution to the lithium-ion battery supply chain?

Meanwhile, China dominates the lithium-ion battery supply chain, controlling 70% of global lithium refining capacity. Sodium-based batteries offer a solution to the electric battery supply chain challenges, particularly for Western countries seeking to reduce their dependence on China for cleantech.

What if Northvolt could scale energy storage?

He argued that if Northvolt could scale the technology and build the supply chains successfully, energy storage could end up with an order book of more than \$55bn, equal to its current automotive orders from the likes of BMW, VW and Scania. Carlsson's four years at Tesla were "super important", according to Campbell.

How much energy can a sodium ion battery produce?

It said its first generation of sodium-ion battery cells could achieve energy densities of up to 160 Wh/kg and promised an increase to 200 Wh/kg for the next generation. Earlier this year, it confirmed that China's Chery will become the first automaker to use its sodium-ion battery tech.

Ingrid Capacity was founded last year. Image: Ingrid Capacity. Recently-formed energy storage developer Ingrid Capacity is building a 70MW battery storage facility in Sweden for a delivery date as early as H1 2024, the largest planned in the Nordic country.

STOCKHOLM, SWEDEN: DECEMBER 2023 - Enerpoly (enerpoly), a zinc-ion battery innovator, has been awarded an \$8.4M / 88.5M SEK three-year grant from the Swedish Energy Agency (energimyndigheten.se), enabling the Stockholm company to demonstrate their patented technology with the world's first megafactory

to manufacture zinc-ion batteries. This grant marks ...

Gothenburg-based Texel Energy Storage makes fully recyclable battery storage for... [Read More](#). February 12, 2021. News; ... Swedish battery technology development company TEXEL Energy Storage AB (TEXEL)... [Read More](#). March 26, 2020. News; The Swede who tames Solar Energy.

Intermittency is growing on the Swedish grid as more renewable energy sources come online, and the capacity of the country's existing large pumped hydro energy storage (PHES) portfolio to balance this is being exhausted. Battery storage projects are being launched to make up the shortfall as the country seeks net zero by 2045.

A structural battery, on the other hand, is one that works as both a power source and as part of the structure - for example, in a car body. This is termed "massless" energy storage, because in essence the battery's weight vanishes when it becomes part of the load-bearing structure.

TEXEL is developing cost effective, sustainable and circular hybrid energy storage / batteries and energy production solutions. In combination with renewable energy the TEXEL technology is not only cost competitive to fossil fuels, but as well competitive in terms of energy distribution, 24 hours a day, 7 days a week, 365 days per year.

A couple of weeks ago, Northvolt announced that it was going to invest in this new, more climate-friendly and cheaper battery technology for energy storage together with the Swedish supplier Altris. Northvolt is using a material called Prussian White in ...

With an increasing need for renewable energy, energy storage is key, but storing electricity can be both expensive and inefficient. The Swedish high-tech company Azelio converts stored thermal energy to electricity, which makes the process more efficient and cost-effective. Azelio has a sustainable energy solution based on the Stirling engine.

And our assessment was that, yes, the time is probably right, says Greger Ledung, expert in battery research at the Swedish Energy Agency. Step-by-step assistance. The support that Northvolt has received from the Swedish Energy Agency has come in various stages and had different purposes. With the first support stage, a feasibility study was ...

A 70MW battery storage project being developed by Ingrid Capacity, set to be the largest in the country when online in H1 2024. Image: Ingrid Capacity. Some 100-200MW of grid-scale battery storage could come online in Sweden this year, local developer Ingrid Capacity told Energy-Storage.news.

The Master's Programme in Battery Technology and Energy Storage prepares you for a career in both world-class academic research and the Swedish battery/electromobility industry, where qualified professionals

are in high demand. Through the programme, you will gain a keen understanding of the fundamentals of battery materials, cells and systems ...

SaltX Technology's strategy is to develop, deliver and license the SaltX technology to the world's leading OEM manufacturers of energy efficient heating and cooling products. Superior energy storage capacity can be obtained, cost-effectively and scalable, on ...

Ingrid Capacity and Locus Energy Link for 196MW Swedish BESS Portfolio 04 Sep ... Credit: Piyaset / Shutterstock. Ingrid Capacity has teamed up with Locus Energy to deploy 196MW of battery energy storage system (BESS) capacity in southern Sweden. ... coupled with their in-house technology and data-driven focus, was pivotal in our investment ...

Northvolt has made a breakthrough in a new battery technology used for energy storage that the Swedish industrial start-up claims could minimise dependence on China for the green transition.. The ...

Energy-related CO2 emissions keep rising internationally* and with increased urbanisation and electrification, this trend seems to continue. There are, however, innovative solutions that can help change this. In the town of Årebo, the housing company Årebo installed battery storage to balance the energy in their buildings, allowing for better energy efficiency ...

Swedish battery technology development company TEXEL Energy Storage AB (TEXEL) receives support from Swedish government agency Vinnova to develop and demonstrate a new unique battery technology, originally developed in collaboration with, among others, the US Department of Energy (DOE), and one of their laboratories, Savannah River National ...

Northvolt AB is a Swedish battery developer and manufacturer, specialising in lithium-ion technology for electric vehicles. [4] ... in 2019. This factory not only produces batteries, but also develops solutions for excavators, mining machines, ...

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 ...

From ESS News. Swedish zinc-ion battery cell technology specialist Enerpoly has opened a large-scale factory in northern Sweden. The 6,500m² facility is a significant development in Enerpoly's ...

Stockholm | Northvolt has made a breakthrough in a new battery technology used for energy storage that the Swedish industrial start-up claims could minimise dependence on China for the green ...

The company's model is typically to sell at the ready-to-build (RTB) stage but the different approach in this

case - work started on the unit in late 2022 - was explained by the company's technical lead for energy storage Michiel van Asseldonk in an interview (Premium) at the Energy Storage Summit Central Eastern Europe 2023 in Warsaw ...

"Batteries are a critical technology within the energy transition," said Emma Nehrenheim, Chief Environmental Officer at Northvolt, in the release. "But with massive growth in battery demand it is critical that we secure solutions to recycle batteries and ensure reliable, sustainable supply of critical minerals.

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. The cell ...

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 nickel, and could remove global dependence on China, which dominates critical material supply chains within the energy transition, the company said ...

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