



BUHLE POWER

Switzerland Zurich Electric Sodium Sulfur Energy Storage Project





Overview

Which energy storage projects have been commissioned in Switzerland?

Axpo commissioned its BESS in February this year while utility Thurplus commissioned a 3MW system in September last year. But Switzerland was the location for one of the largest energy storage projects commissioned in recent years, a 20GWh pumped hydro energy storage (PHES) unit which started operations in June 2022 in the Canton of Valais.

How does a sodium-sulfur battery work?

The sodium-sulfur battery uses sulfur combined with sodium to reversibly charge and discharge, using sodium ions layered in aluminum oxide within the battery's core. The battery shows potential to store lots of energy in small space.

Who makes sodium sulfur batteries?

Utility-scale sodium-sulfur batteries are manufactured by only one company, NGK Insulators Limited (Nagoya, Japan), which currently has an annual production capacity of 90 MW . The sodium sulfur battery is a high-temperature battery. It operates at 300°C and utilizes a solid electrolyte, making it unique among the common secondary cells.

How long does a sodium sulfur battery last?

Lifetime is claimed to be 15 year or 4500 cycles and the efficiency is around 85%. Sodium sulfur batteries have one of the fastest response times, with a startup speed of 1 ms. The sodium sulfur battery has a high energy density and long cycle life. There are programmes underway to develop lower temperature sodium sulfur batteries.



Switzerland Zurich Electric Sodium Sulfur Energy Storage Project



[Switzerland Zurich Energy Storage Project 2024](#) [Powering a ...](#)

SunContainer Innovations - Summary: The Zurich Energy Storage Project 2024 is a groundbreaking initiative aimed at advancing renewable energy integration and grid stability in ...

[Switzerland: EWS and MW Storage expand battery unit to ...](#)

May 29, 2024 · The project in Ingenbohl, Switzerland. Image: EWS AG. Utility EWS AG and developer MW Storage have completed the expansion of a battery energy storage system ...



[sodium-sulfur Archives](#)

Jun 30, 2014 · Sodium-sulfur (NAS) batteries made by NGK Insulators will be supplied by a subsidiary of chemicals company BASF for power-to-gas projects by South Korean company ...

[Switzerland's EUR2 Billion Energy Storage Project: Powering the ...](#)

Jun 4, 2025 · But with Switzerland's track record in balancing ecology and innovation, this could set new standards for sustainable energy storage. As European countries scramble to meet

...



[South Korea's long-term sodium-sulfur BESS demonstration project ...](#)

A megawatt-scale sodium-sulfur (NAS) battery demonstration project involving South Korea's largest electric utility has gone online. Operational start of the 1,000kWdc/5,800kWhdc NAS ...



[Shaping a sustainable energy future o ETH Zürich Foundation](#)

The new professorship "Electrical Energy Storage Systems" seeks to develop advanced storage technologies that will enable a reliable and sustainable energy supply. On the one hand, we



[Sodium-Sulfur Batteries for Energy Storage Applications](#)

Abstract--This paper is focused on sodium-sulfur (NaS) batteries for energy storage applications, their position within state competitive energy storage technologies and on the modeling.



Long-duration sodium-sulfur BESS demonstration project ...

Jun 6, 2023 · A megawatt-scale sodium-sulfur (NAS) battery demonstration project involving South Korea's largest electric utility has gone online.



NGK supplying 230MWh sodium-sulfur ...

Apr 23, 2024 · A grid-scale sodium-sulfur (NAS) battery storage site in Japan. Image: NGK Insulators. NGK Insulators will provide 72 ...

sodium sulfur Archives

Jul 19, 2023 · NGK Insulators will supply a sodium-sulfur (NAS) battery storage system to a project for utility Sala Energy in Japan's Shizuoka ...



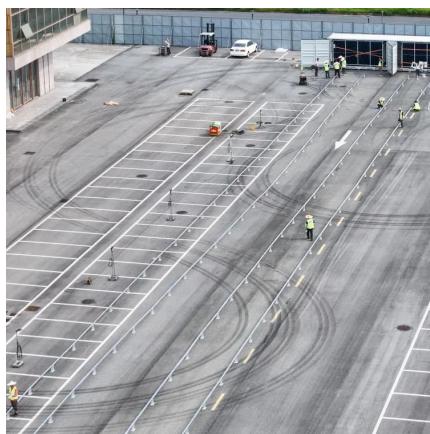
PG&E, Energy Commission Unveil 4MW NaS Battery Energy Storage ...

May 23, 2013 · This smart grid project is a utility-scale sodium-sulfur (NaS) battery energy storage project. It has a 4-megawatt capacity, and can store more than six hours of energy.



[NGK sodium-sulfur batteries: Japan project. ...](#)

May 27, 2025 · Image: Toho Gas. Japanese manufacturer NGK Insulators' proprietary battery tech features in a large-scale project that has just ...



[NEC Announces Completion of Switzerland's Largest Energy Storage ...](#)

Mar 25, 2019 · "We are excited to deliver the largest energy storage project in Switzerland," said Steve Fludder, CEO of NEC Energy Solutions. "As countries modernize their power grids ...

[Switzerland: EWS and MW Storage expand ...](#)

May 29, 2024 · The project in Ingenbohl, Switzerland. Image: EWS AG. Utility EWS AG and developer MW Storage have completed the expansion of a ...



[Swiss Energy Storage Project Bidding: Key Insights for 2025](#)

You know, Switzerland's energy landscape is at a crossroads. With nuclear phase-outs accelerating and renewable targets tightening (40% clean energy by 2035), the country's ...



Case note Battery energy storage PCS solution for EKZ, ...

Mar 15, 2024 · Battery energy storage PCS solution for EKZ, one of Switzerland's largest energy companies BESS 1 MW / 250 kWh PCS solution at the Dietikon Power Plant in Zurich, ...



Shaping a sustainable energy future o ETH ...

The new professorship "Electrical Energy Storage Systems" seeks to develop advanced storage technologies that will enable a reliable and sustainable ...

Demand for energy storage in Switzerland , ZHAW Zurich ...

The study examines the need and role of energy storage in Switzerland for the years 2035 and 2050. It considers various types of storage -- electricity, heat, and gas/liquid storage -- and ...



Sodium Sulfur Battery

Sodium-sulfur batteries are rechargeable high temperature battery technologies that utilize metallic sodium and offer attractive solutions for many large scale electric utility energy storage ...



NGK's NAS sodium sulfur grid-scale batteries in depth

Feb 6, 2017 · Japan-headquartered NGK Insulators is the manufacturer of the NAS sodium sulfur battery, used in grid-scale energy storage systems around the world.



Sulfur-Based Energy Storage Systems: Lithium-Sulfur, Sodium-Sulfur...

Sep 1, 2025 · This special issue is dedicated to highlighting cutting-edge research and comprehensive reviews that explore the potential of sulfur-based batteries to redefine the

...

Contact Us

For technical specifications, project proposals, or partnership inquiries, please visit:
<https://bukhobuhle.co.za>

Scan QR Code for More Information



<https://bukhobuhle.co.za>