FINLAND ENERGY STORAGE MANAGEMENT

Is energy storage a viable option in Finland? This study reviews the status and prospects for energy storage activities in Finland. The adequacy of the reserve market products and balancing capacity in the Finnish energy system are also studied and discussed. The review shows that in recent years, there has been a notable increase in the deployment of energy storage solutions.

Which energy storage technologies are being commissioned in Finland? Currently,utility-scale energy storage technologies that have been commissioned in Finland are limited to BESS (lithium-ion batteries) and TES,mainly TTES and Cavern Thermal Energy Storages (CTES) connected to DH systems.

Is the energy system still working in Finland? However,the energy system is still producing electricityto the national grid and DH to the Lempaala area,while the BESSs participate in Fingrid's market for balancing the grid . Like the energy storage market,legislation related to energy storage is still developing in Finland.

What drives the Finnish storage market? Revenues in the Finnish storage market have largely been driven by ancillary services,primarily mFRR,aFRR,FCR-N,FCR-D,and FFR,but opportunities in energy trading are also increasing with the renewables buildout.

What factors influence the development of energy storage activities in Finland? Several parameters are influencing the development of energy storage activities in Finland, including increased VRES production capacities, prospects to import/export electricity, investment aid, legislation, the electricity and reserve markets and geographic circumstances.

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Can PHS be used as energy storage in Finland? Plans exist for PHS systems,but studies have indicated that there may be few suitable locations for PHS plants in Finland [94,95]. While large electrolyzer capacities are planned to produce renewable hydrogen,only pilot-scale plans currently exist for their use as energy storagefor the energy system (power-to-hydrogen-to-power).

A 100% renewable energy scenario was developed for Finland in 2050 using the EnergyPLAN modelling tool to find a suitable, least-cost configuration. Hourly data analysis a?|

This sustainable energy storage solution is being constructed in Pornainen, southern Finland. This sand battery is a thermal energy storage system that utilizes a unique material: crushed soapstone.

Finland telecoms firm Elisa has received a?!3.9 million from the government to form a VPP using batteries, potentially the largest in Europe. The company will put the funding towards a rollout of its Distributed Energy a?|

Polar Night Energy's sand-based thermal storage system. Image: Polar Night Energy. The first commercial sand-based thermal energy storage system in the world has started operating in Finland, developed by Polar Night a?|

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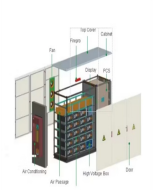
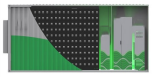
In late January, Energy-Storage.news covered French developer Neoen's announcement of Yllikkala Power Reserve Two (YPR2), a 56.4MW/112.9MWh BESS set to be Finland a?? and the Nordics" a?? biggest a?|


The Nordic region's ancillary services markets present an opportunity for fast-responding battery storage assets. According to research group LCP Delta, more than 300MW of grid-scale BESS is expected to come a?|

Wartsila Energy Storage & Optimisation is a leading global energy storage integrator offering top-tier energy storage technology and solutions. By integrating renewables, energy management technology, and storage with a?|

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The project will be a 1-hour duration (20MWh) battery energy storage system (BESS) near Mantsala municipality in southern Finland's Uusimaa region, and marks the third collaboration between MW Storage and Fluence in a?|


Developers Taaleri Energia and Merus Power have partnered to deploy a 30MW/36MWh battery energy storage system in Finland, one of the country's largest. Merus Power will also provide the energy management a?|

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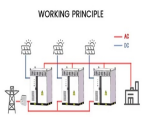
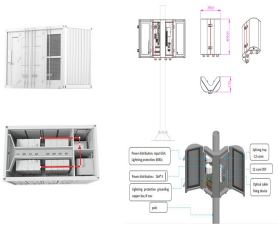
Helen Ltd is investing in the new 40 MW battery electricity storage system in Nurmijarvi. The storage is one of the first large-scale battery electricity storing systems in a?|

Battery energy storage system . capacity 38.5 MW / 38 MWH . Finland. The battery energy storage system is in the construction stage, will be commissioned in the spring 2025 and will participate in the frequency control market as well a?|



Vantaa Energy plans to construct a 90 GWh thermal energy storage facility in underground caverns in Vantaa, near Helsinki. It says it will be the world's largest seasonal energy storage site by



The BioFlow-project develops safe and sustainable flow batteries for large-scale energy storage, based on bio-inspired organic molecules, in collaboration with Prof. Petri Pihko, University of Jyvaskyla. Funded by a?|


A huge sand battery is set to slash the carbon emissions of a Finnish town. The industrial-scale storage unit in Pornainen, southern Finland, will be the world's biggest sand battery when it


We are a Finnish leader in the energy storage solutions sector. We specialize in the manufacturing and system integration of Battery Energy Storage Systems (BESS). Sales Manager, Energy Storage, Europe Out of office until August a?|

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Energy Storage Summit 2025. 24 - 25 February 2026 InterContinental London The Meeting Point for Energy Storage Leaders EPC has an engineering and sales branch in Helsinki, Finland since 2021 and an engineering branch in a?|

The IEA report recommends that the Finnish government should support the deployment of energy storage solutions in order to accelerate the transition to a low-carbon energy system. It also suggests that policies should be put in a?|