

## S Group is building two energy storage systems in Sipoo's logistics centres

**As part of their ambitious climate targets, S Group wants to reduce its CO<sub>2</sub> emissions by 90% by 2030. In the fall of 2021, Merus Power will supply two energy storage systems to S Group's logistics centers in Sipoo, Finland. These energy storages are to participate in the energy and frequency regulation markets and store any excess production of solar power.**

S Group aims to be a carbon-negative company as early as 2025. This is planned to be achieved by using renewable energy and investing in energy efficiency. The yard area of S Group's grocery and consumer goods logistics centers in Sipoo already has two photovoltaic systems with a total of 4,000 solar panels. The photovoltaic systems generate electricity for the logistics centers as much as the maximum of tax-free production.

The photovoltaic systems will now be combined with two 1MW / 1MWh energy storage systems supplied and commissioned by Merus Power, which are to participate in the energy and frequency regulation markets and to store possible overproduction of solar power. Traditionally, real estate only consumes energy, however, with the help of energy storage systems, the microgrids of these logistics centers can make efficient use of the energy produced by their own renewable production.

*“The energy storages in Sipoo's logistics centers support the operation of the electricity network by correcting frequency fluctuations. In the future, balancing the electricity grid will become increasingly important the more renewable energy there is in the electricity grid. The growth of renewable energy is an important trend that contributes to sustainable energy transition, but the challenge is weather-dependent fluctuations in energy production and uncertainty in forecasting. Energy storages support the stability of the electricity network”*, says **Kari Tuomala**, CEO of Merus Power.

The operational reliability and energy efficiency of logistics centers are important issues for S group. *“We want to lead the way and promote energy efficiency and the introduction of renewable energy sources not only within S group, but also in the big picture. We use energy storage systems primarily in the energy and frequency regulation markets. Participating in the energy market can help avoid major electricity price spikes. Effective frequency control, on the other hand, stabilizes the operation of the electricity grid and therefore promotes the introduction of renewable energy sources. We are also exploring the possibilities of utilizing energy storage systems to ensure energy supply for important functions in logistics centers. Energy storage systems are very versatile”*, says **Miika Kakko**, S Group's Energy Manager.

### Merus Power – Technology from Finland

Merus Power's energy storages include modern lithium-ion batteries, inverters, and transformers, as well as other system equipment. Both delivered energy storage systems have a power of 1 MW and a capacity of 1 MWh and are based on modular technology developed by Merus Power itself. The network connection equipment and software of energy storages are designed and manufactured at Merus Power's facility in the city of Nokia, Finland.



Merus Power's energy storage systems are in use, for example, in Ii, Finland, at the Kuivaniemi Viinamäki wind farm to balance wind power production. Merus Power has supplied energy storages to Pirkanmaa, Finland, for example, for Lempäälän Energia's LEMENE project and, as the latest cooperation project with Elenia and Fotum, securing electricity supply in a sparsely populated area. 85% of the company's production is exported.

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#### Additional information

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**Merus Power** is a technology company that enables a sustainable and energy-efficient future. We design and manufacture innovative electrical engineering solutions, such as energy storages, power quality solutions and services for renewable energy and industrial needs. With our scalable technology, we enable the growth of renewable energy in electric grids and improve the energy efficiency of our society. We are a domestic innovative electrical engineering specialist and operate in global and fast-growing markets. Our personnel represent internationally respected engineering expertise. [www.meruspowers.com](http://www.meruspowers.com)

**S Group** is a retail group owned by Finnish households. S Group is made up of 19 regional cooperatives, SOK and their subsidiaries. We offer everyday services at grocery stores, hotels and restaurants, department stores, service station stores, hardware stores, and our own bank. We are the largest private employer in Finland: there are nearly 40,000 of us S Group employees. Our climate goals are the most ambitious in the country, and we are Finland's largest seller of domestic and local food. Our tax footprint is nearly €1.8 billion, and we annually invest approximately €500 million in Finland. [s-ryhma.fi/en](http://s-ryhma.fi/en)