Polarium to Install Energy Optimization System in Supermarket

Polarium, in collaboration with ICA Maxi Kungälv, will install a smart Polarium Energy Optimization System in the supermarket during the spring of 2023. The system will enable ICA Maxi Kungälv to make net savings of up to 80 percent on electricity costs and contribute to balancing the electricity grid.

Since 2019, price of electricity has tripled, and the price variation has seen an eleven-fold increase.* The overall cost will be cut by balancing electricity usage during between hours of high and low demand, which in turn decreases the risk of insufficient grid efficiency.

ICA Maxi Kungälv will become the first Swedish supermarket to install a Polarium Energy Optimzation System. By using spot price optimization and peak shaving –storing energy during high supply, for consumption during low supply – the system will enable the supermarket to reduce its energy costs. In addition, the system opens new sources of revenue by feeding energy back to the grid on the so-called 'Frequency regulation market'. Combined, this can cut net electricity costs by as much as 80 percent, according to calculations made by Polarium based on electricity data from ICA Maxi Kungälv.

"The energy crisis is tough for all of us, and we will keep doing whatever we can to keep our costs down and maintain low prices. It's an important part of our job to cut our energy costs by optimizing energy storage. By doing this we also enable a more robust and balanced energy system for everyone, which is great." says Johannes Larson at ICA Maxi Kungälv.

The 1 MW energy optimization system will be one of the largest systems ever installed in a commercial building in Sweden. With a combination of market leading lithium-ion batteries and smart software, the system will identify the optimal time to store or release energy and run automatically for secured reserve power and lowered costs.

"We are very happy to install our Energy Optimization System in Kungälv. In times of high and volatile electricity prices, energy storage can play a crucial part in flattening price curves, by distributing load more evenly throughout the day. We see great potential in installing Energy Optimization Systems in larger supermarkets throughout Sweden." says Stefan Jansson, CEO and founder of Polarium.

The installation is expected to be completed by May 2023 and will offer FCR and FFR services to the Swedish Electricity Transmission System Operator, Svenska Kraftnät.

* Measured as the average difference between the five hours with the highest price and the five hours with the lowest price of the day. (Nord Pool, Electricity price area 3 March-June)



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About Polarium

Polarium provides energy storage solutions built on lithium-ion technology for the telecom, commercial, and industrial segments. Polarium's headquarters and R&D center are situated in Sweden, with manufacturing in Mexico, Vietnam, and South Africa. Polarium serves customers worldwide through its global sales channels and presence in Indonesia, New Zealand, Sweden, South Africa, the UK, and the US. Today, our market-leading solutions are in use on all continents and all climate zones – from the Equator to the Arctic – ensuring that the flow of energy never stops, while enabling our customers to reduce energy costs and carbon footprint. Read more at polarium.com