Tekniska Verken's Lambohov Accumulator Tank: Smarter District Heating

In this edition of the Euroletter, we are pleased to feature our Swedish member **Tekniska Verken**'s innovative **accumulator tank in Lambohov**. Inaugurated in **autumn 2023**, the tank **delivers heat to Linköping residents in a smart and sustainable way** and marks an important step towards more resource-efficient regions.

The **accumulator tank** is a **large heat-storage unit for district heating**. It is an insulated steel container, resembling a giant thermos, that **can store 30,000 cubic metres of water**. This corresponds to around 1,300 MWh of heat, enough to heat approximately 80 houses for a year with a single charge. By storing heat when demand is low and releasing it during peak periods, the tank **makes district heat production more efficient**. It helps **balance heat supply**, **reduces** the risk of **network disruptions**, and **enables maintenance work** without relying on expensive or less environmentally friendly backup energy. For instance, during planned district heating maintenance, the tank saved Tekniska Verken at least SEK 500,000 by avoiding oil use or start-up of another boiler. Over four days, it supplied just over 1,000 MWh of heat to Linköping residents without additional heating or backup boilers.

The **project began** in **2017** to support Linköping's ambition to become carbon neutral by 2025 and cost SEK 113 million. **Lambohov was selected** because the tank needed to be **located next to a large district-heating pipe with a high flow rate**, while avoiding any impact from lower-temperature water from Gärstad on the wider network. The tank was **designed by White Arkitekter** and clad in grey-painted sheet metal, with 830 brown and gold slats. Many of the slats include LED lighting that can be dimmed and programmed to create different visual effects.