



We buy and recycle your excess heat

When planning your next data center investment - add the value of your generated excess heat to the revenue side. The benefits are both financial and environmental.

With SamEnergi, Vattenfall offers to buy your excess heat, transport it and reuse it where it is needed the most, heating up nearby residential and commercial buildings that is. SamEnergi makes the process of selling your excess heat easy. Making your business a small scale energy producer and contributor to the circular economy, where energy can be transferred from those with a surplus to those in need.

Vattenfall in short

Vattenfall is a European energy company with approximately 20,000 employees. For more than 100 years we have electrified

How to become a partner - 5 simple steps

1. Contact Vattenfall early in the establishment process.
2. Receive help to find a suitable location for the data center.
3. Vattenfall develops a business case to buy the excess heat.
4. Final agreement.
5. Installation and commissioning of heat recovery equipment.

industries, supplied energy to people's homes and modernised our way of living through innovation and cooperation.

We are determined to enable fossil-free living within one generation. To succeed we must become fossil free ourselves. But that's not enough. We are looking beyond our own industry to see where we can really make a difference. And that's where SamEnergi plays a key role. ■

Contact us

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District heating networks in Sweden

- Askersund
- Gustavsberg
- Haninge/Tyresö/Älta
- Knivsta
- Motala
- Nyköping
- Storvreta
- Uppsala
- Vänersborg

Vattenfall subsidiaries further operate the following sites:

- Fagersta, Grängesberg, Ludvika, Norberg (VB Energi)
- Hemse, Klintehamn, Slite, Visby (Gotlands Energi AB, GEAB)
- Lilla Edet

SamEnergi makes a tangible product out of recovered heat

SamEnergi is Vattenfall's business for purchasing excess heat from companies, such as data centers. By standardising the terms we seek to make it almost as simple to sell heat to us as it is to buy district heating from us.

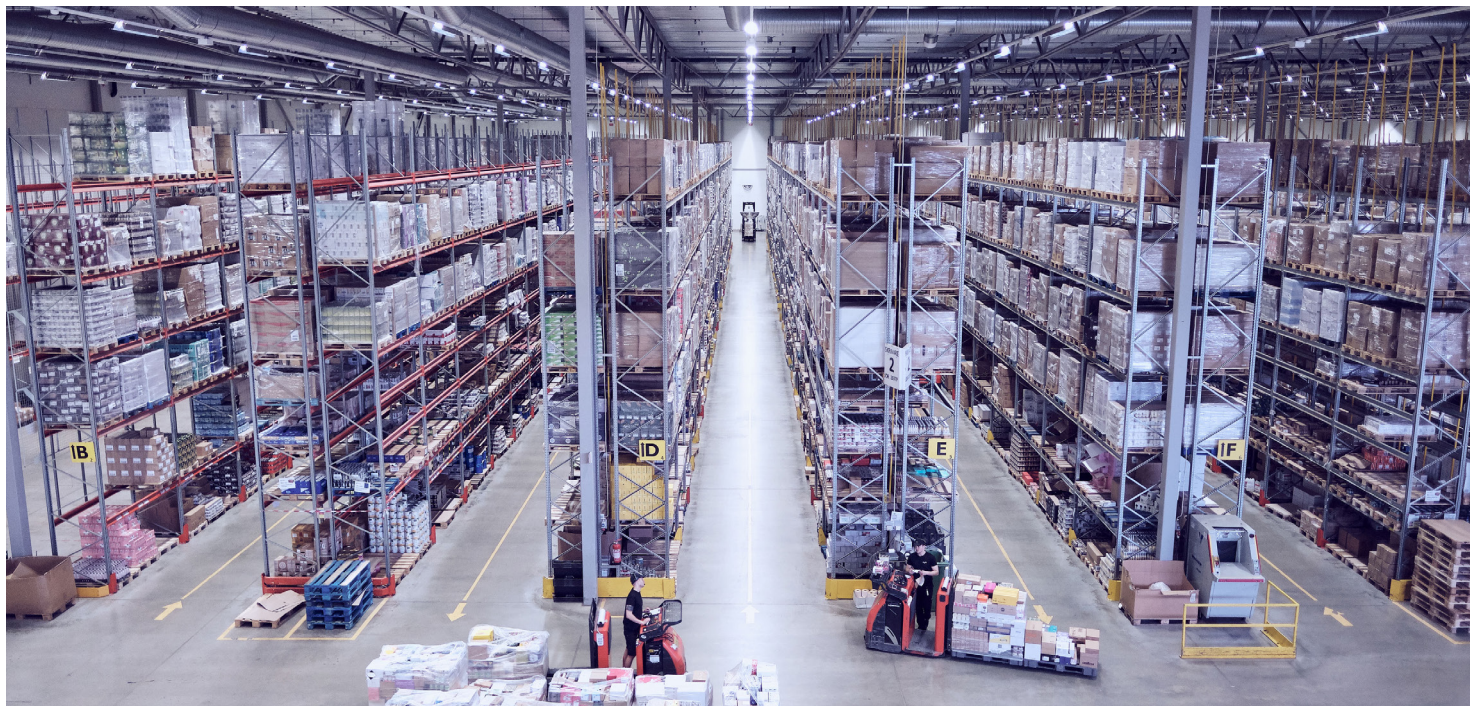
Not new - but now more accessible

Recovering excess heat from businesses and supplying it to the district heating network is far from new as such. In Vänersborg, Sweden, excess heat produced by Vargön's smelting factory has heated the town since the 80s. But generally, collaboration terms have been freely negotiated and more or less only an option for heavy industries with large excess heat volumes. SamEnergi now standardises the agreement format, aiming to lower the threshold for

companies of all sizes to sell their excess heat. It is all transparent.

SamEnergi's pricing model is based on Vattenfall's marginal production cost. The payment for sold heat is either comprised of variable remuneration only or a combination of fixed and variable remuneration.

"District heating has contributed greatly to reducing the footprint of energy on the environment and climate. SamEnergi plugs into existing district heating infrastructure, enabling a circular energy system where more actors can take an active role," says Simon Dalili, head of SamEnergi within Vattenfall Heat. ■



The pilot made it obvious that the excess heat should be reused

In 2017, grocery wholesaler Dagab's storage in Jordbro, south of Stockholm, hosted SamEnergi's first pilot implementation. As the company now prepares a new 100 000 m² logistics center northwest of Stockholm, the income from excess heat has its given place in the business case.

Future generations might laugh at how today's businesses used energy only once and flushed out heat with rooftop fans. This is one of the reflections that has guided Dagab in its shift towards using its energy multiple times.

Dagab is owned by Axfood - one of Sweden's leading grocery store chains - and focuses on assortment, purchasing and logistics.

Efficient use of energy plays a central part in the Axfood Corporations strategy. One important focus is how the

purchased energy is used, and what type of energy it is. The goal is now to reuse it as many times as possible. That's where recovering excess heat comes into play, contributing to the reduction of the company's carbon footprint.

A task from day one

The planned logistics center is intended to replace no less than six current Dagab warehouses by 2023. Ever since day one on this project, the question of what to do with the excess heat has been on the table.

If Dagab had not run the SamEnergi pilot in Jordbro, they might not have been fully aware of the possibilities, the company recognises. But this time around it was an obvious thing to do. From the start, the project engineers were given the task to present a set of alternative cases for evaluation. ■



**Interested in SamEnergi?
Contact us!**

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