

# EUROPEAN GREEN DIGITAL COALITION

Supported by the European Commission and Parliament at the EU Council's request, the EGDC unites companies to use digital solutions for reducing emissions across key sectors.



Funded by  
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Stockholmshem, one of Sweden's largest municipal housing companies, launched a large scale project to optimise heating in 21,678 of its 29,000 apartments. This involved installing over 21,678 temperature sensors connected to an AI-based control system to reduce energy consumption and improve indoor climate comfort. The solution was implemented gradually between 2021 and 2024.

This case study is an ex-post assessment carried out on Stockholmshem's 21,678 residential apartments in Stockholm, Sweden comparing data for a period of 1 year in 2021 and 2024.

**Organisational contribution:** Stockholmshem is responsible for deploying the solution. This aligns with A-level classification as defined by ITU-T L.1480 (contribution of implementing the integrated solution or the innovation of the solution).

## Quantified impacts:

1 year

Assessment period

-276 to -545 tCO<sub>2</sub>e/year

Net carbon impact range  
accounting for uncertainty

-0.3 kgCO<sub>2</sub>e/year

Net carbon impact per square  
meter of residential apartment  
space per year

## Other identified impacts:

**Economic: Cost savings** - Reduction in energy use leads to significant cost savings. If all cost savings are invested into typical business carbon-intensive activities, it is estimated that this increase in emissions could result in a ~16% reduction of the total net impact. However, Stockholmshem has confirmed that any cost savings achieved through the solution will be reinvested into additional energy efficiency initiatives across its residential buildings.

**Further environmental impact: Energy savings** - The solution also enables more stable indoor temperatures which reduces the use of energy at peak times and avoids the use of fossil fuel powered "peaker" plants. However, this has not been quantified due to insufficient data.

**Relevant links:** [Contact us](#) | [Methodology](#) | [Calculator](#)

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