

# Hammarby Sjöstad Site Visit

16/10/2024

## Summary

**Hammarby Sjöstad**, a district in the South-East of Stockholm's centre, is one of the city's largest and newest urban development projects. The site visit had two main parts. Once a neglected industrial area on heavily polluted land, it has transformed since the 90s into a vibrant district with 25,000 residents and over 10,000 workplaces, making it one of the city's largest urban development projects.

First, participants had a thorough presentation from the key members of **ElectriCITY Innovation**, an association established in 2015 with the aim of turning Hammarby Sjöstad into a climate-neutral district by 2030. ElectriCITY operates around 30 testbeds focused on energy, transportation, circular economy and digitalization.

Then, visitors toured different areas of the neighbourhood, gaining insight into its innovative governance and different technical solutions located both in housing association buildings and in public space.



## Solutions / Learnings Overview

The Hammarby Sjöstad site visit showcased several solutions to help cities advance their climate and energy transition goals. Main takeaways are outlined below, organised by ASCEND's Solution Packages.

### SP1: Digital Infrastructures and ICT Solutions

- A **microgrid platform** run by ElectriCITY's standardises data across buildings, integrating energy, heat pump, and building performance information to optimise management.
- An **EV-charging app** allows users to schedule the staggered use of centralized EV-chargers in parking garages, keeping loads stable while allowing more cars to charge in a week.

## SP2: Energy Communities and Prosumers

- The **energy community established includes 10 housing associations**, operating as an economic association. Members prioritise profitability of decisions, differentiating this model from typical citizen-led energy communities.

## SP3: Deployment of Energy-Efficient Buildings and RES

- **Buildings in the district integrate PV panels on facades and rooftops**, while seven large heat pumps contribute to building energy needs by tapping into geothermal sources at 330m depth.
- The canal features a **biogas system** converting flushed grey waters into electricity and biogas. A membrane purification system cleans sewage water for secondary uses, including a local brewery.

## SP4: Decarbonising Mobility and Freight Logistics

- The **community car-sharing and carpooling initiative** is growing in popularity, with facilities located centrally for easy access
- A **centralised EV-charger system** allowed two housing associations sharing a garage to increase by 10 their number of charging points. Unlike individual EV chargers, the centralised charge-node system has no active equipment in the outlets, only in the main cabinet. A state subsidy covered 50% of the installation.
- **Trans-shipment hubs** consolidate local delivery parcels, allowing for local distribution via smaller EVs, as opposed to larger, fossil-fueled vehicles.
- **Stormwater management** is a key component of Hammarby Sjöstad's public space design. Increased canopy, stormwater canals and infiltration planters are part of a highly functional system of green-and-blue infrastructure.

## SP5: Citizen-centred solutions

- Identifying existing **organizations** that are active, regardless of their thematic focus, has allowed ElectriCITY to then effectively engage broader citizens in energy-related issues.
- **Campaigns and workshops** targeting students have been a major success. For example, the 'Future Scouts' activities engage 2,500 pupils to learn about energy savings and circular economy.
- 'Ecodrives' provide **training of housing association energy managers** after mapping the energy performance of their building. The initiative has resulted in a 20% improvement in energy efficiency.
- **'Energy class journeys'** allow the associations' energy managers to develop a concrete, step-by-step roadmap to increase the energy performance of their buildings.

## SP6: Urban Orchestrator

- **Eco-governance** is model developed in the district focusing, on integrated resource management, collaborative governance, and resident involvement. It demonstrates how cities can balance environmental priorities with livability and community engagement.
- The **entire district is governed under the structure of an economic association** that brings together the housing associations with the experts of ElectriCITY, which makes them eligible for public funding (e.g., subsidies) but also able to adopt other economic market tools. Joint procurement processes allow members to save money across all housing associations.

