



# HYDROSYM-2030

## SWEDEN: HELSINGBORG & UMEÅ

### Emissions domains addressed by the ECT Activity



Consumption of non-electricity energy for thermal uses in buildings & facilities



Multi-sector waste management & disposal



Land use (agriculture, forestry & other land uses)



Industrial process emissions



All vehicles & transport (mobile energy)

### Key Terms

Capital Orchestration | Transition Portfolios | Net Zero Accelerator | Industrial Symbiosis | Investment Sequencing

### Levers of Change

Data and Digitalisation | Financing and funding | Governance and policy | Learning and capabilities | Social innovation | Technology/infrastructure

### Context & Challenges

HYDROSYM is working with the cities of Helsingborg and Umeå to shift from project-by-project climate funding to portfolio-based capital orchestration. We developed six integrated governance tools – Strategic Design Framework, Transition Roadmap, Technical Roadmap, Action Plan, Financial Roadmap and Skills Roadmap – and tested them against a live portfolio of active industrial decarbonisation projects. When city, energy company and industry are coordinated as a system, the transition rate can more than double. HYDROSYM-2030 is built on this insight. In Helsingborg and Umeå, this challenge is particularly evident in industrial systems where long investment cycles, shared infrastructure, and cross-sector dependencies require coordinated action. HYDROSYM responds by shifting focus from isolated projects to portfolio-based transition orchestration, using existing assets such as waste heat, wastewater, and industrial symbiosis flows as entry points for system change.

#### What We Learned – Five Honest Insights for Other Cities:

1. The barriers aren't technical, they're structural – permitting processes, governance gaps and capital readiness matter more than technology maturity
2. Trust cannot be shortcut – invest disproportionately in relationships before you have anything concrete to show
3. Think in portfolios, not single hero projects – if one project stalls, the portfolio keeps moving
4. Ask what influence you have that no one else has – and use it. Permitting speed, convening power and strategic credibility are real levers
5. Capture learning while it's happening – the knowledge produced, not the deliverables, is the real output

### Activities & Innovations

- Development of a Net Zero Accelerator Framework for Industry – scalable across emission sectors – enabling cities to structure transition as investable portfolios
- Co-creation of transition roadmaps with embedded governance structures and capital sequencing logic, directly linked to Climate City Contract implementation
- Identification and structuring of industrial symbiosis opportunities through deep engagement with industrial partners whose challenges, risks and goals can appear to be on a different scale and timeframe to typical city governance frameworks
- Testing of capital orchestration templates with industrial partners in Helsingborg and Umeå, uncovering unexpected opportunities through innovative governance engagement
- Cross-city learning and structured reflection to demonstrate how Mission Cities can shift from grant management to strategic capital coordination

### Expected Impact & Outcomes

- Transition from pilot-based climate action to structured investment portfolios – demonstrating how to structure a transition investment case that works for both municipal decision-makers and private investors
- Increased ability for cities to mobilise and sequence capital for industrial transition across 5–10 year timeframes
- Governance architecture that bridges project pilots to balance-sheet deployment
- Scalable frameworks enabling replication across Mission Cities – providing a complete package for cities wishing to work with industry within an innovative governance framework
- Accelerated implementation of high-impact decarbonisation projects in hard-to-abate sectors

#### A Replicable Framework for Europe

Helsingborg and Umeå are developing the first Net Zero Accelerator Framework for Industry explicitly designed to be replicated across European cities. The complete package – governance tools, transition roadmap methodology and capital orchestration templates – will be finalised and publicly available in 2026.

