

Advancing Local Heating Transitions

Best Practices in Organisational and Governance Models

MAIN TAKEAWAYS

Research within the HeatCOOP project explores best practices for local heating and decarbonisation initiatives across Europe, focusing on organisational and governance models. Based on the analysis of 14 case studies, the findings show that cooperatives, associations, purpose-driven companies, and municipal actors can all support heat transitions, with their effectiveness shaped by national contexts. A key insight is that while grassroots, bottom-up initiatives are crucial for project initiation, long-term success often depends on professionalisation. Combining community engagement with structured management is therefore essential for sustainable and scalable local heating solutions.

Introduction

Decarbonising heating systems is a critical component of the broader energy transition, particularly in urban and semi-urban contexts. The HeatCOOP project seeks to identify effective models for enabling this transition, with a particular focus on community-driven approaches.

This Research Brief synthesises insights from a comparative analysis of best practice examples across multiple European countries. The cases include a diverse set of initiatives, ranging from citizen-led cooperatives and associations to municipally driven projects. The objective is to understand how organisational and governance models influence the implementation, scalability, and long-term sustainability of local heating solutions.

Methodology

The research is based on a structured analysis of 14 best practice projects in Austria, Belgium, the Czech Republic, Germany, the Netherlands, Slovenia, and Switzerland.

Each case study was assessed using a consistent framework capturing:

- Technical and organisational characteristics
- Legal structure (e.g. cooperative, association, municipal company)
- Financing and business models
- Role within the local heat transition

A subset of community action projects (cooperatives, associations, and purpose-driven companies) was analysed in greater depth. The

analysis focused on three key dimensions:

- Organisational structure (bottom-up vs. top-down)
- Membership models (open vs. localised)
- Supply- vs. demand-side orientation

The findings were synthesised to identify overarching trends and derive lessons for future local heating initiatives.

Results

The analysis shows that multiple organisational pathways can effectively support local heating transitions. Rather than identifying a single optimal model, the findings highlight key structural patterns related to governance, participation, and long-term sustainability.

Organisational Models and Legal Structures

Four primary organisational models were identified:

- Cooperatives enable broad participation and democratic governance, making them particularly suitable for mobilising citizen investment and engagement. They also provide strong legal and financial structures for managing large infrastructure investments.
- Associations support community mobilisation and knowledge sharing but face limitations in raising capital due to weaker financial structures.
- Purpose-driven companies offer efficient and scalable solutions, though they tend to



prioritise profit, which may limit participatory governance.

- Municipal models ensure coordinated implementation and large-scale deployment but often lack direct citizen empowerment and are constrained by public budgets.

The analysis shows that the suitability of each model is strongly influenced by national legal frameworks and institutional traditions rather than purely technical considerations.

From Bottom-Up Initiatives to Professionalisation

Most community-based projects originate from bottom-up initiatives driven by citizens addressing local energy challenges. However, many transition toward professionalised structures as projects develop.

This shift reflects increasing organisational and technical complexity. Professionalisation improves efficiency, continuity, and access to expertise, but may reduce direct community control. Three main pathways can be observed: projects that remain bottom-up, those that are top-down from the outset, and those that evolve from grassroots initiatives into professionalised organisations.

The transition from bottom-up to professional management is particularly common, indicating that combining community engagement with formal structures is a key success factor.

Membership Models and Participation

Membership structures influence participation and governance. Two main types emerge: open (“umbrella”) models and localised models.

Open models enable broader participation and facilitate capital mobilisation, while local models strengthen local ownership but may limit scalability. Participation is typically stronger in bottom-up initiatives, where stakeholders identify closely with project goals.

However, maintaining long-term engagement can be challenging, as continuous participation requires sustained effort and may lead to fatigue among participants.

Supply and Demand Orientation

Most initiatives are primarily supply-oriented, focusing on renewable heat generation and infrastructure. Some projects also integrate demand-side measures, such as energy efficiency improvements.

Demand-oriented approaches are often initiated bottom-up, as users directly benefit from reduced costs and increased control. While the distinction between supply and demand is not always clear-

cut, this orientation can influence organisational structures and stakeholder involvement.

Key Challenges and Success Factors

A central challenge is balancing participation with efficiency. While community involvement enhances legitimacy and acceptance, it can also increase complexity and slow decision-making. Financial limitations, particularly for non-profit models, remain a significant barrier.

Key success factors include aligning organisational models with national contexts, enabling early community engagement, ensuring access to financing and expertise, and supporting gradual professionalisation. Overall, successful initiatives tend to combine bottom-up mobilisation with stable and scalable organisational structures.

Literature

HeatCOOP Project (2025). Best practices of projects and initiatives for district heating supply (Deliverable D2.2).

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