

FEV Signature Solutions Municipal Heat Planning & Energy Transition

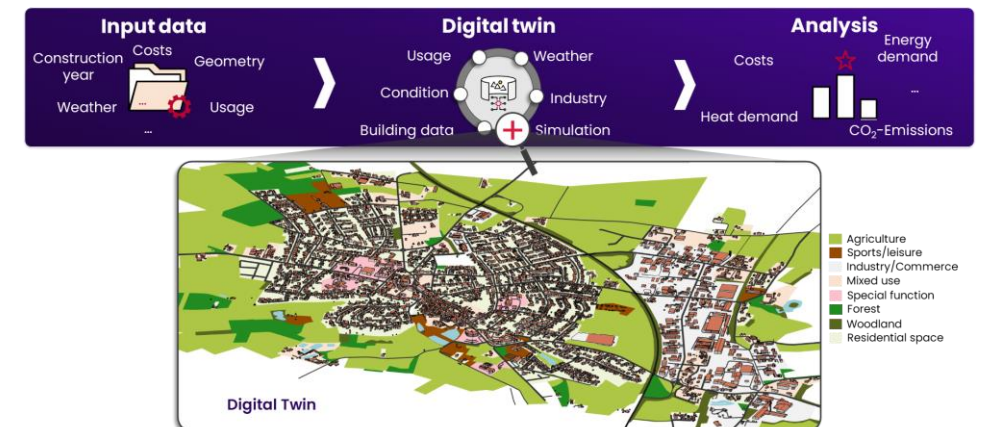
Shape a climate-neutral heat supply for your municipality while reducing project timelines through digital workflows

FEV offers

- ▶ Legally compliant municipal heat planning with technology-neutral approach (district heating, decentralized, hybrid)
- ▶ Structured five-step planning process
- ▶ Digital and data-driven methodology
 - Use of publicly available geospatial & energy data
 - Automated, reproducible analyses & scenario evaluations
- ▶ Digital twin of the municipality
 - Transient simulations with hourly weather & load profiles
 - Realistic demand curves, network loads & future scenarios
- ▶ Stakeholder engagement & transparency
 - Support for public and stakeholder participation processes
 - Clear, decision-ready results for administration and policymakers

Why FEV

- ▶ 45+ years of engineering excellence, trusted by its customers to deliver innovative, production-ready solutions with deep domain expertise
- ▶ Proven expertise in energy system & heat sector modeling
- ▶ Robust decision basis for long-term municipal planning
- ▶ Customer-centric solutions: High transparency and traceability of assumptions & results
- ▶ End-to-end engineering support from analysis to implementation roadmap



Reference project FEV energy + resources

PARTNER: MUNICIPALITY OF SCHERMBECK

FEV energy +
resources

Municipal Heat Planning in Schermbeck

FEV supports the municipality of Schermbeck in drawing up a municipal heating plan in accordance with the Heating Planning Act and the NRW Heating Planning Act.

The goal is to achieve a climate-neutral and socially acceptable heat supply by 2045 based on an analysis of heat demand and local potential, followed by an action plan.

The basis for this is digital modelling of the municipality, which is used to develop scenarios for future heat supply and make them assessable.

> 13.000

Residents

8

Districts with different settlement
structures

> 83 %

Fossil fuel heating systems

Reference project FEV energy + resources

PARTNER: CITY OF WITTENBURG

FEV energy + resources

Municipal Heat Planning in Wittenburg

FEV supports the Wittenburg municipal authority in drawing up a municipal heating plan in accordance with the Heating Planning Act and state-specific requirements.

The aim is to achieve a climate-neutral and socially acceptable heat supply by 2045 based on an analysis of heat demand and local potential, followed by an action plan.

The basis for this is digital modelling of the municipality, which is used to develop scenarios for future heat supply and make them assessable.

> 9.150

Residents

14

Districts with different settlement structures

> 79 %

Fossil fuel heating systems

Reference project FEV energy + resources

PARTNER: CITY OF AACHEN

FEV energy + resources

Industrial Park Transformation in Aachen

FEV is conducting a research project to support the energy transformation of 100+ industrial parks (Aachen region) with the goal of achieving climate neutrality by 2035.

The aim is to analyse the future transformation paths of local companies and to derive the energy requirements of industrial parks in the region.

The basis for this is the digital modelling of sector groups in order to analyse their individual transformation paths before they are combined into synergistic clusters.

>200

Industrial parks in the research area

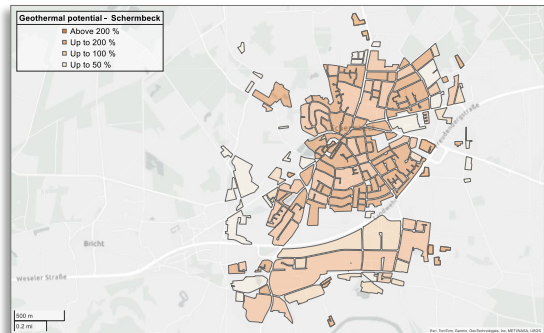
10

Utilities and network operators as stakeholders

20%

Symbiotic efficiency improvement as a goal

FEV shortens municipal heat and energy planning with innovative methodology through the application of an automated digital twin



Feasibility study for the construction and operation of a heating grid

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Introduction

- ☒ 2025
- ☐ 2026
- ☐ 2027
- ☐ ff.

Effect

- ☐ No-regret
- ☐ Short-term
- ☐ Mid-term
- ☒ Long-term

Municipal influence

- ☐ Verbrauchen & Vorbild
- ☒ Versorgen & Anbieten
- ☐ Planen & Regulieren
- ☐ Beraten & Motivieren

Target

The aim is to analyse and implement a possible new district heating network. This will increase the proportion of buildings and residential units supplied with district heating.

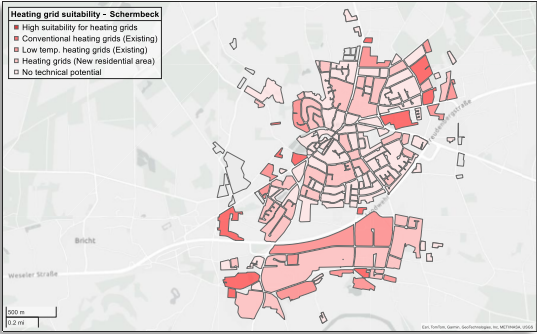
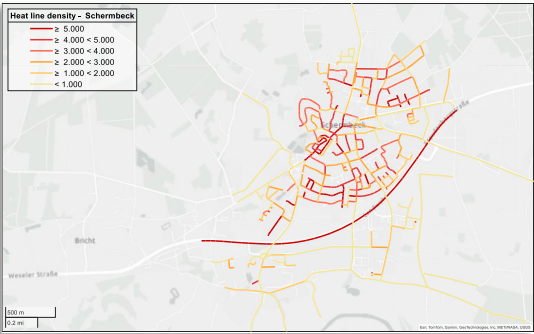
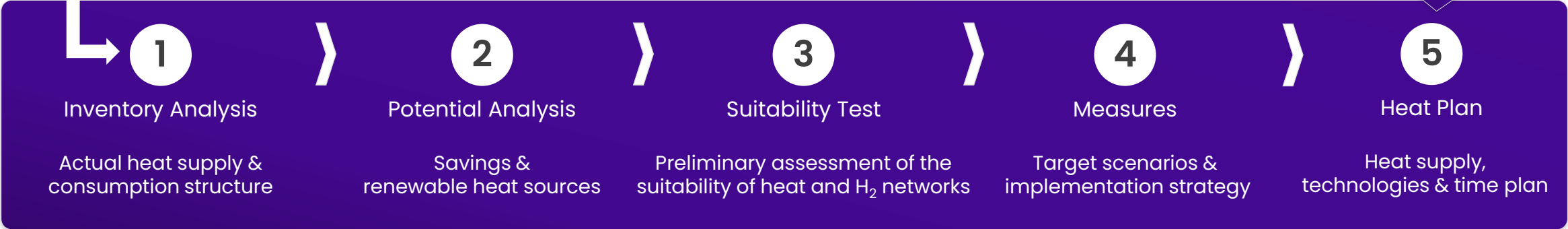
Target group

Owners in the potential development area

Current situation

Actors

Continuous involvement of stakeholders & public



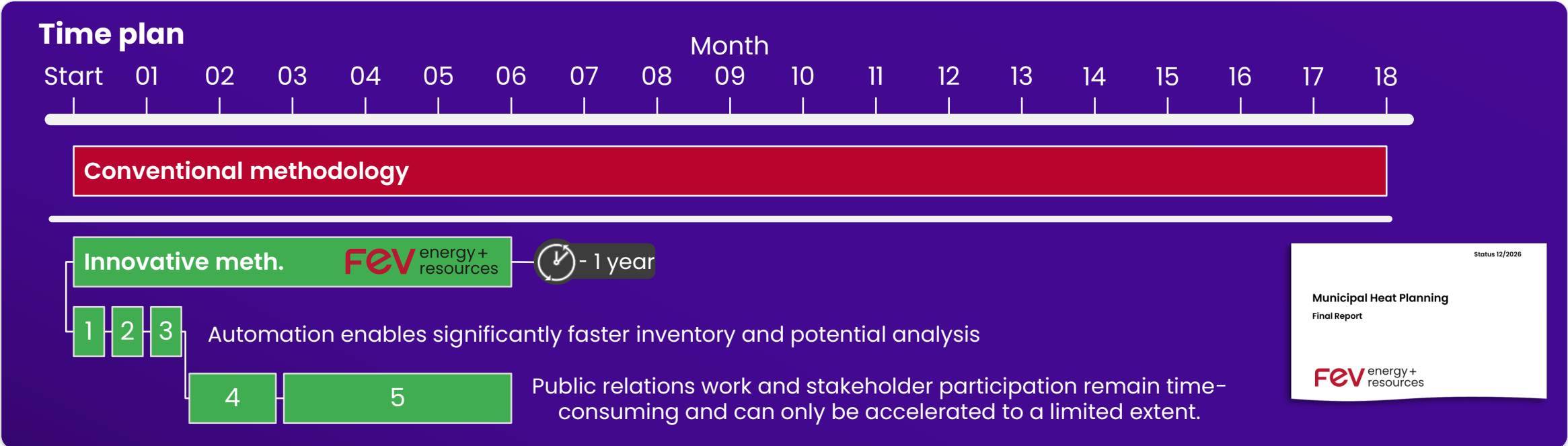
Status 12/2026

Municipal Heat Planning

Final Report

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FEV shortens municipal heat and energy planning with innovative methodology through the application of an automated digital twin



Faster creation of the heating plan



Lower resource consumption leads to cost reduction



Consistent quality through model validation

Get in touch with us for further information



[www.fev.com/en/
signature-solutions](http://www.fev.com/en/signature-solutions)