

D 8.2 Dedicated project page on beneficiaries' websites

HeatMineDH is a European project funded by the LIFE Programme which aims to develop business cases and investment plans for the incorporation of low-grade heat sources into high temperature district heating networks. Its name stands for Low-Grade Renewable and Waste **H**eat **M**apping and **I**nvestment Planning for **E**fficient **D**istrict **H**eating.

Background

District heating (DH) can contribute to achieving the objectives of the European energy transition and a net-zero economy by replacing consumption of fossil fuels by an increased use of renewable energy sources and waste heat. This results in heating systems that are more resilient and environmentally friendly. The HeatMineDH project will thus support district heating utilities and municipalities in achieving the efficiency targets along the next 10 years.

To do so, it addresses the need for increased sustainability and resilience in DH by focusing on breaking existing barriers hindering the adoption of low-grade heat sources. Acknowledging the predominant reliance on fossil fuels in the DH sector across Europe, the project aims to provide investment plans to 8 DH case studies, emphasizing the integration of low grade (or low temperature) waste heat (or residual heat) and renewable sources.

Objectives and key activities

HeatMineDH aims to support district energy utilities and municipalities in achieving the efficient DH targets along the next 10 years by building upon the capacity and skills of a consortium made of universities, research centres, businesses and associations. To do so it will devise 8 feasibility studies and practical investment plans for the integration of low-grade renewable and waste heat sources.

The analysis will be carried out according to 4 key steps:

1. Assessing the existing situation, based on the analysis of available data.
2. Mapping the availability of low-grade renewable and waste heat sources.
3. Planning an optimal roadmap for the integration of the most affordable sources able to ensure compliance with efficient DH targets.
4. Developing business models and draft contracts for the actual implementation of a 10-year-long investment plan.

The analysis will be carried out considering local, national, and European regulations and policies. The utility and the local municipality will be provided with a classification of the possible sources in accordance with European directives (EED and RES) as well as with the still evolving taxonomy regulation.

Moreover, the project will foster stakeholder interaction, promoting the organization of focused meetings based on previously shared information and facilitating negotiation. This will be crucial to prepare draft contracts and collect all the needed information to make utilities ready for tendering. Contacts with investors will be prepared, e.g., for project finance opportunities.

A network of cities and relevant stakeholders will be contacted to maximize its exploitation and replication potential in addition to creating a virtuous circuit of reciprocal support among utilities and municipalities. Dedicated workshops and dissemination activities will support this interaction, including specific training moments to showcase previous projects and best practice solutions.

Expected outcomes

HeatMineDH seeks to overcome barriers related to source/load mapping, policy incentives, technical know-how, and perceived high investment costs associated to making district energy networks more sustainable. The project's comprehensive approach includes assessing, mapping, analysing, and planning for feasibility studies and investment plans to greener, smarter, and more resilient energy systems. The project's impact is anticipated not only in achieving sustainability goals but also in contributing to the broader European energy transition and Net-zero carbon economy targets.

In other words, the project is expected to help utilities to overcome the barriers to using low-grade heat sources and promote a faster deployment of low-grade sources into district heating.

Facts:

- Project name: HeatMineDH (Low-Grade Renewable and Waste Heat Mapping and Investment Planning for Efficient District Heating)
- Project duration: September 2023 - August 2026
- Partners: [EURAC](#) (Italy), [Austrian Institute of Technology - AIT](#) (Austria), [HAWK University](#) (Germany), [University of Zagreb](#) (Croatia), [SOLID Solar Energy Systems](#) (Austria), [NODA Intelligent Systems](#) (Sweden), [Euroheat & Power](#) (Belgium), [Johanneberg Science Park](#) (Sweden)
- Coordinator: [EURAC](#)
- EU Grant data: Call LIFE-2022-CET-DH; full acronym: LIFE22-CET-HeatMineDH; Contract Agreement nr. 101120948; EU commission project webpage available [here](#).

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