

4th SAPHEA Newsletter - June 2025

# SAPHEA

**INTEGRATING GEOTHERMAL HEATING  
AND COOLING NETWORKS IN EUROPE**

## **DEVELOPING A SINGLE ACCESS POINT FOR THE MARKET UPTAKE OF GEOTHERMAL ENERGY USE IN MULTIVALENT HEATING AND COOLING NETWORKS ACROSS EUROPE**

SAPHEA's goal is to address the prevailing barriers of renewable heat by developing and supporting market uptake measures for enabling geothermal heating and cooling (geoHC) networks to significantly contribute to the European heating and cooling (HC) sector. This in turn will contribute to a gradual and continuous replacement of fossil fuels while at the same time increasing the use of on-site available low-exergy renewable energy sources (RES) in order to reach the 2050 zero net emissions goals of the European Union.

The project's approach includes investigating key techno-socio-economic drivers to make "geoHC networks" more attractive, integrating geoscientific data and knowledge into existing decision support tools, developing digital interfaces to provide guidance to stakeholders in Europe (i.e. energy suppliers or communities), developing a web based hub and network as well as supporting knowledge transfer and capacity building measures for geothermal energy use in heating and cooling networks.



Funded by  
the European Union

SAPHEA has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No [101075510 – SAPHEA]



## Shaping Europe's Clean Heating Future: SAPHEA Outcomes and Achievements

The SAPHEA project, funded by the EU's Horizon Europe programme, aimed to phase out fossil fuels in Europe's heating and cooling sector by accelerating the deployment of geothermal-based heating and cooling (geoHC) systems.

### Over its three-year journey, SAPHEA delivered remarkable results:

The project developed a comprehensive Market Uptake Hub featuring user-friendly digital tools, hosted three high-profile international events, and organized over 15 capacity-building workshops across Europe. In total, more than 600 professionals were trained, significantly surpassing the original targets.

SAPHEA also produced a wide range of strategic outputs – including regional roadmaps, advanced scenario catalogues, policy guidance, and innovative financing strategies – all designed to support the practical rollout of geoHC systems. A standout feature was the launch of the interactive "Choose Your Adventure" gamebook, offering an accessible and engaging way for stakeholders to learn about geothermal energy.

By addressing technical, economic, and social dimensions, SAPHEA successfully laid the groundwork for broader geothermal adoption. It brought together municipal planners, researchers, engineers, policymakers, and students, creating a vibrant community of future geothermal ambassadors.

Through the Market Uptake Hub, SAPHEA offers not only powerful planning tools but also a rich library of reports and resources – all available for free at [saphea.eu](https://saphea.eu) (and in the future at <https://gogeothermal.eu/projects/saphea>)

Key reports include:

- **Scenario Catalogue** – Outlining techno-economic pathways for geoHC development
- **Business Models & Financing Report** – Presenting strategies for structuring and funding projects
- **Social & Environmental Assessment** – Guidance on public acceptance and sustainability
- **Policy and Roadmap Report** – Supporting local and national alignment with EU energy targets
- **Comprehensive Regional Roadmaps** – Offering step-by-step guidance tailored to local contexts

With its wide-reaching impact, practical tools, and skilled stakeholder network, SAPHEA has built a solid foundation for Europe's green transition – empowering the shift toward geothermal heating and cooling as a mainstream, fossil-free solution.

[Learn more about the SAPHEA project](https://saphea.eu)

## Explore the Market Uptake Hub: Your Gateway to Geothermal Planning Tools

The Market Uptake Hub is SAPHEA's flagship digital platform – a one-stop access point for tools, data, and guidance supporting the development of geothermal-based district heating and cooling (geoDHC) systems across Europe.



The Hub is structured into four key sections:

### ◆ **Strategies & Guidelines**

Find SAPHEA's core strategic outputs, including scenario-based planning tools, regulatory overviews, business model templates, and financing strategies – all designed to support local and regional geoDHC implementation.

### ◆ **Data & Viewers**

Interactive tools and key datasets support spatial and financial planning. The GIS Implementation Viewer showcases existing geoDHC projects in Europe. The EU27 Financial Mapping Tool helps identify funding opportunities, while SAPHEA's spatial datasets assist with resource assessment and energy planning.

### ◆ **Knowledge Base**

Access a wide range of public project outputs, including reports on market conditions, policy recommendations, scenario catalogues, business models, and data documentation – ready to be reused by local authorities, researchers, and practitioners.

### ◆ **Gamebook**

A unique, interactive guide inspired by the Choose Your Own Adventure format. Step into the shoes of different market actors, face real-world challenges, and explore SAPHEA's resources through engaging scenarios, fact sheets, and self-assessment tools.



[Visit the Hub](#)

## New Video: Geothermal Energy for a Fossil-Free Future

Buildings are responsible for 40% of the EU's total energy consumption and 36% of its greenhouse gas emissions – making clean heating and cooling a crucial part of Europe's climate strategy.

Geothermal energy offers a sustainable and proven solution. When integrated into district heating and cooling (DHC) networks, it can deliver clean, reliable, and affordable energy for entire communities without relying on fossil fuels.



Yet today, less than 5% of buildings in Europe use geothermal energy.

The SAPHEA project aims to change that. In our new video, we explore how geothermal can support the transition to a fossil-free future across Europe.

Watch the video and learn more about the potential of geothermal energy:

SAPHEA Video

## Past events

### Webinar: Explore the SAPHEA Tools and Market Uptake Hub for Geothermal DHC!

On Thursday, 26 June, we hosted an in-depth webinar exploring the SAPHEA tools that support the integration of geothermal energy in district heating and cooling (DHC).

Participants discovered key features of the Market Uptake Hub, scenario catalogues, datasets, and case studies driving geothermal deployment across Europe.



[Recording & presentations](#)

[More information about the webinar](#)

### Webinar: How to integrate Geothermal Energy into local heating and cooling planning?

On 26 June 2025, SAPHEA hosted a webinar showcasing how cities can integrate geothermal energy into local heating and cooling planning.

Experts and city representatives from München, Wien, and Bruxelles shared real-world examples, while the SAPHEA team presented open-source tools to support local authorities in decarbonising urban energy systems.

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## Project Partners:



VIA University  
College



<https://gogeothermal.eu/projects/saphea>



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