

D 7.2 Digital Market Uptake Hub

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Author: A.K.Bruestle, GeoSphere Austria / S. Hoyer, GeoSphere Austria /

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Supporting Team: G.Cittadini, EGEC / J. Brives, Gesosphere /

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Contact: A.K. Bruestle anna-katharina.bruestle@geosphere.at



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Introduction

The SAPHEA project was launched to accelerate the transition to sustainable, fossil-free heating and cooling systems in Europe by unlocking the vast potential of geothermal energy. Aiming to overcome key non-technical barriers — from complex planning to financing and social acceptance — SAPHEA empowers local authorities, planners, and energy actors to confidently develop and scale up geothermal heating and cooling (geoHC) networks.

Central to this mission is the Market Uptake Hub, a comprehensive digital platform that turns SAPHEA’s vision into practical action. By providing an integrated suite of planning tools, interactive scenario models, and a rich set of detailed reports, the Hub equips users with everything they need to design, evaluate, and implement geoHC projects tailored to local conditions.

From techno-economic assessments and business model guidance to policy roadmaps and social acceptance strategies, the Hub’s resources transform complex challenges into manageable, actionable steps. In this way, it serves not only as a technical support center but as a catalyst for building a new generation of geothermal-ready communities across Europe.

www.saphea.eu

<https://gogeothermal.eu/geothermal-dhc-market-uptake-hub/>



Figure 3: Overview graphics of the Market Uptake Hub Main Content

Knowledge Base

The Hub offers a rich Knowledge Base where users can learn about the fundamentals and benefits of geoHC networks, key technologies, and policy contexts. This section helps build a strong foundation of understanding, making it easier for newcomers and experienced practitioners alike to get started and stay updated.

It provides all public deliverables developed within the project as well as the SAPHEA Zotero library which provides all literature used to produce the outcomes.

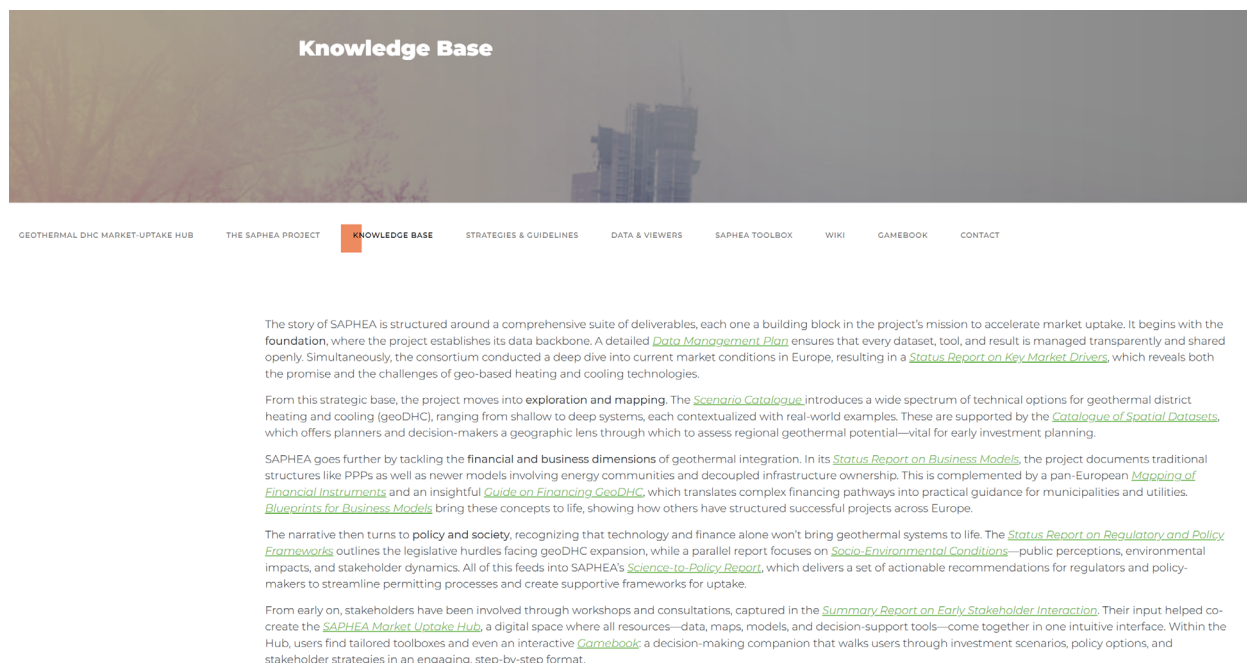


Figure 4: Screenshot of the subpage Knowledge Hub

Strategies and Guidelines

Under Strategies and Guidelines, the platform provides a comprehensive collection of reports and guidance documents. These include:

- Regional roadmaps tailored to different European contexts
- Business model and financing guides to help design viable projects
- Social and environmental assessments to support community engagement
- Regulatory overviews
- Policy alignment materials to connect local plans with EU climate targets

These resources help stakeholders navigate from initial idea to implementation, ensuring that projects are well-structured and locally accepted.

Data and Viewers

The Data and Viewers section gives access to valuable datasets and interactive visualization tools. Users can explore geoscientific data, local heat demand, and techno-economic scenarios. These tools help evaluate site-specific conditions and identify opportunities, making early-stage planning more precise and data-driven.

The GIS-Viewer, an uptake from the COST Action Geothermal-DHC, showcases existing geoDHC projects throughout Europe. The EU27 Financial Mapping Tool guides users in finding suitable national and regional funding opportunities. Additionally, a catalogue of spatial datasets compiled by SAPHEA supports local resource evaluation and energy planning efforts

A Map of Geo-DHC installations in Europe, developed under COST Action Geothermal DHC and the SAPHEA project

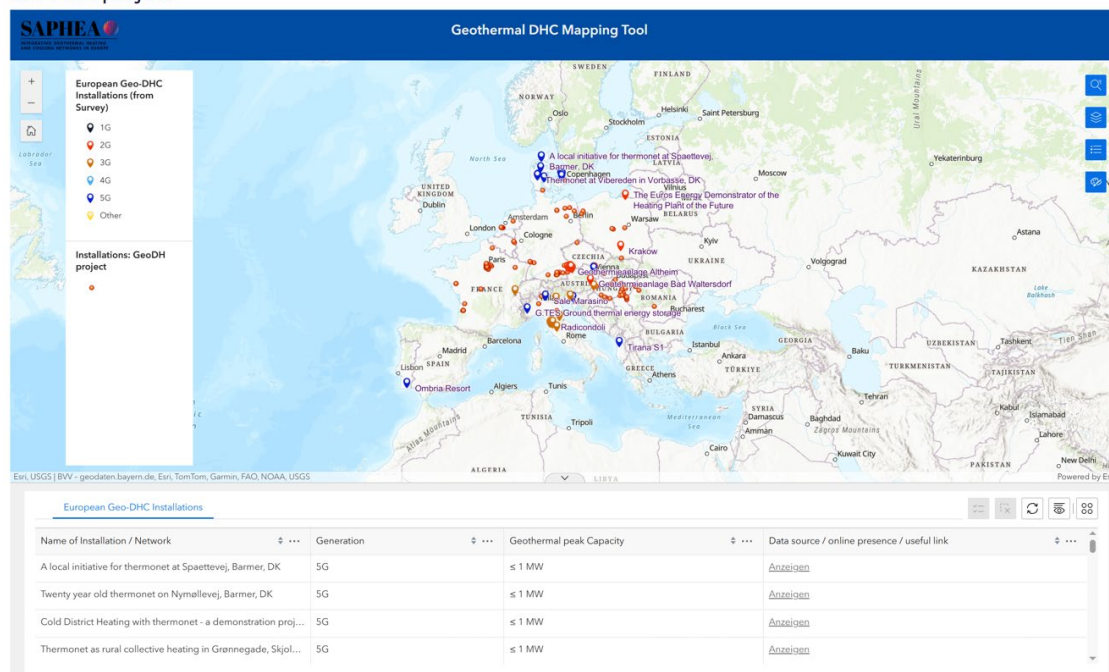


Figure 5: Screenshot of the GIS-Tool providing an overview about existing geoDHC installations

Mapping of financial instruments (EU 27)

Through the joint efforts of three EU funded Projects (CoolLIFE (LIFE21-CET-COOLING Grant ID: 101075405), SAPHEA (Horizon Europe Grant agreement ID: 101075510) and ActionHeat (H2020 Grant ID: 101033706)) it was possible to derive a full-European mapping of financing instruments relevant for Geothermal DHC. Right below, the mapping tool is embedded.

You can also download the excel file and the Status Report to be used offline.

SAPHEA Export of EU-27 Country Mapping of Financing Schemes to decarbonize Buildings, Heating and Cooling

Authors: Giulia Conforto, Marcus Hummel, Francesca Conselvan, Salvador Perez
Affiliations: e-think energy research, Argentinierstraße 18/10, A-1040 Vienna, Austria. conforto@e-think.ac.at, hummel@e-think.ac.at
Description: This dataset contains the mapping of all public and private financing instruments currently available to support the market uptake of geothermal DHC networks. The mapping is divided into two sheets: Public Schemes and Private Schemes. The description of additional data is provided below in the content section. This update includes the mapping of risk-mitigation instruments for geothermal projects.
Last updated: 10th September 2024

Content:	<p>1 Public Schemes: Mapping of all public schemes: each scheme is classified per country, level (European, National, Regional, Local), Name in English and in local language, sectors (Y= directly covered, (Y)= indirectly covered, that is not explicitly mentioned, but reasonably applicable, blank= not covered), type of instrument, main and additional links, a short description and the last time the page was visited.</p> <p>2 Private Schemes: Mapping of all private schemes: each scheme is classified per country, level (European, National, Regional, Local), Name in English and in local language, issuer, sectors (Y= directly covered, (Y)= indirectly covered, that is not explicitly mentioned, but reasonably applicable, blank= not covered), type of instrument, main and additional links, a short description and the last time the page was visited.</p> <p>3 Lists: Values used for drop-down menus.</p> <p>4 Mapping Sources: List and links of sources used to compile the mapping reported in sheets 1 and 2.</p> <p>5 Indicators: List of additional socio-economic, climate and energy indicators used in the assessment.</p> <p>6 Indicators Sources: List of sources and reference year of each indicator.</p> <p>7 Pivot: Pivot tables schemes per various classifications</p> <p>8 Correlation Matrix: Correlation Matrix of main mapping outcomes and indicators</p>
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Acknowledgements: This mapping is a subset of the dataset "EU-27 Country Mapping of Financing Schemes to Decarbonize Buildings, Heating and Cooling." (Conforto and Hummel, 2024a), available on: <https://zenodo.org/records/13332217>
The complete mapping of financing instruments was triggered and funded by the projects CoolLIFE (LIFE21-CET-COOLING Grant ID: 101075405), SAPHEA (Horizon Europe Grant agreement ID: 101075510) and ActionHeat (H2020 Grant ID: 101033706), which highlighted the need for a thorough mapping of financing options to decarbonise the built environment. The costs associated with that work were split among the projects which benefit from it, any other funds received in each project were dedicated to the research specific to the respective project. No double funding was received for this work.

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Figure 6: Financial mapping tool, embedded in the tool & viewers section

Catalogue of Spatial Datasets

SAPHEA_D2.3_Pan_European_dataset_catalogue_V2

SAPHEA Pan-European catalogue of datasets for Geothermal Energy assessment

Authors: Jacques Brives¹, Titus Seeger²
Affiliations: 1. Geosphere Austria ; 2. Technical University of Munich
Description: The following dataset represents a state-of-the-art overview (as of 2025) of selected pan-European geospatial data sources relevant to geothermal energy applications. All cited datasets are freely available, accessible, and can be downloaded via the URLs provided in the table.
How to cite Brives, J., & Seeger, T. (2025). Pan-European catalogue of datasets for Geothermal Energy assessment [Data set]. SAPHEA (101075510). <https://doi.org/10.5281/zenodo.15262168>
Last updated: 15th May 2025

Content:	<p>1. Catalogue</p> <p>List of collected Pan-European datasets classified by data type. The direct URL to the data is given in the content description. The same is true for the licence type in the corresponding row.</p>
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Acknowledgements: This dataset catalogue was triggered and funded by the project SAPHEA (Horizon Europe Grant agreement ID: 101075510). No double funding was received for this work.

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Figure 7 Catalogue of spatial datasets, tool embedded in the Data & Viewer section

Toolbox with Wiki

At the heart of the platform lies the SAPHEA Toolbox, hosted at www.toolbox-saphea.eu. This includes: Calculation modules for scenario development and technical feasibility assessments, building on established tools like GEOPHIRES and Hotmaps.

And a Wiki, offering step-by-step explanations, practical examples, and detailed technical background to support users throughout the planning and decision-making process

Together, these tools transform complex planning tasks into a guided, manageable journey.

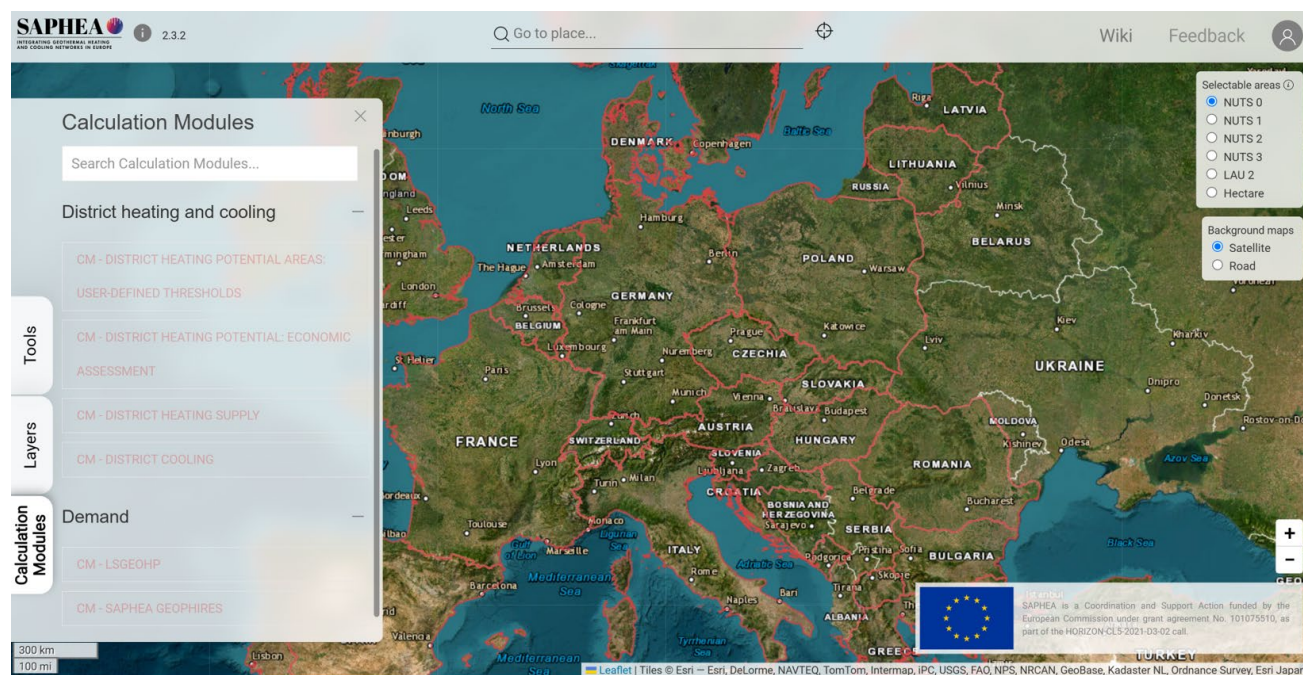


Figure 8: screenshot of the SAPHEA toolbox, developed within WP3

Gamebook

For a more engaging learning experience, the platform features the “Choose Your Adventure” Gamebook. This interactive tool lets users explore planning and decision-making challenges in a playful, story-driven format — perfect for workshops, training, or simply to deepen understanding of early-stage planning dynamics. Users can take on the role of different market actors and face real-world challenges. The gamebook is designed to offer a path through SAPHEA’s key deliverables, turning the fact sheets, assessment tools and developed scenarios into more comprehensive and accessible content.



Figure 9: screenshot of the Gamebook of SAPHEA, digital guide through the deliverables and GeoHC journey

Contact and Community

Finally, the Contact and Community section helps users connect with SAPHEA experts and other stakeholders in the LinkedIn Group <https://www.linkedin.com/groups/9508341/>. It offers opportunities to share experiences, ask questions, and join a growing network of geothermal pioneers across Europe.

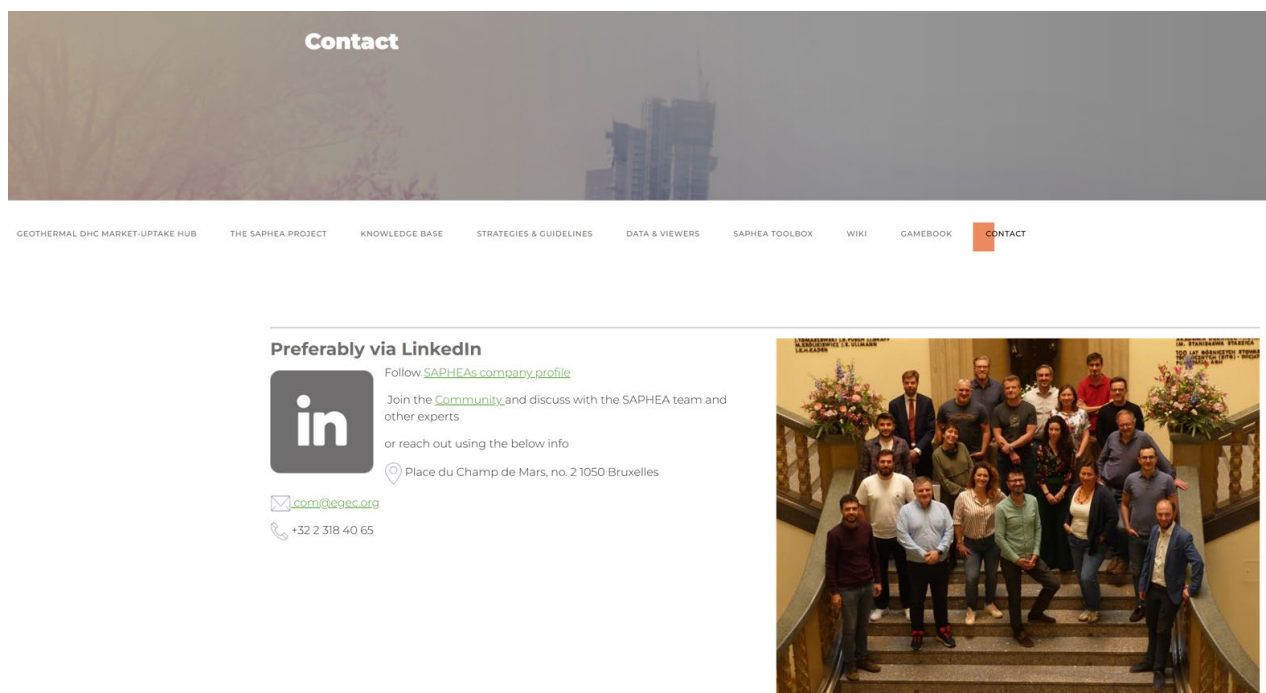


Figure 10: Screenshot of the contact subpage of the Market Uptake Hub