

**SAPHEA - Developing a single access point for the market uptake of geothermal energy use in multivalent heating and cooling networks across Europe**

**In a nutshell**

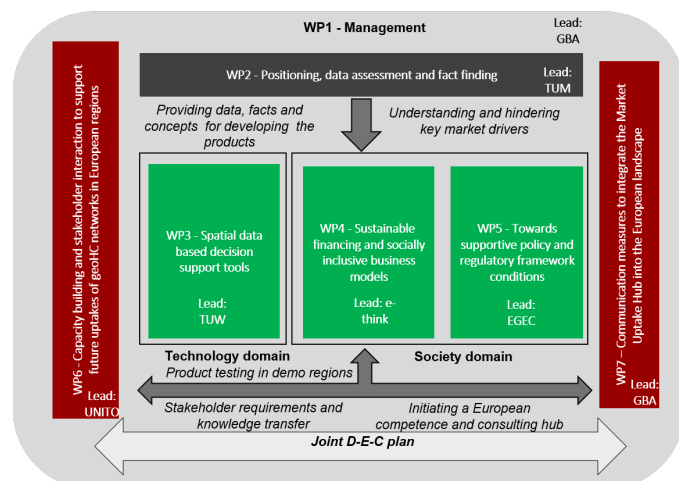
<b>Funding program</b>	HORIZON-CL5-2021-D3-02-03	<b>Runtime</b>	10/2022 to 06/2025
<b>Consortium</b>	<i>Geological Survey of Austria (AT), e-think (AT), AGH University of Science and Technology (PL), University of Turin (IT), European Geothermal Energy Council (BE), VIA University College (DK), Technical University of Vienna (AT), Technical University of Munich (DE), ENGIE (FR), Geothermal Engineering Ltd. (Associated Partner, UK).</i>		
<b>Scope</b>	Integrating geothermal energy (source and storage) at its full technological range into heating (and cooling) networks at temperature ranges between <30°C and up to ~100°C (' <i>geoHC networks</i> ')		

**Objectives**

- Establishing a **digital access point** for decision making support and consultancy on geothermal energy use in heating and cooling networks
- Adapting and **upgrading existing datasets and tools** for early stage investment decisions and strategic planning of energy suppliers, communities and municipalities
- Fostering **supportive market frameworks** to facilitate future investments into 'geoHC networks'
- Reducing social gaps and barriers to **bring 'geoHC networks' closer to regional stakeholders** across Europe
- **Empowering** future investors and operators of 'geoHC networks'

**Approach**

- 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 for providing guidance to stakeholders in Europe (e.g. energy suppliers or communities)
- Developing a web based hub as well as a network for geothermal energy use in heating and cooling networks
- Knowledge transfer and capacity building



## Expected outcomes

Title	Type	Title	Type
Status report on <b>key market drivers</b>	Report	Technological catalogue of <b>'geoHC network' schemes</b> at different MRLs	Report
Status report and adapted blueprints of <b>business models</b> related to geoHC networks	Report	Status report and recommendations concerning <b>regulatory and policy frameworks</b> in Europe	Report
Status report and adapted blueprints of <b>financial mechanisms &amp; schemes</b>	Report	Status report on <b>socio-environmental conditions</b> concerning the implementation of 'geoHC networks'	Report
Open-source <b>toolboxes</b> for <b>early stage decision support</b> and strategic planning	Tools	<b>Digital Market Hub</b> on geoHC networks including an interactive guideline ( <b>'Gamebook'</b> ) for strategic planning	Tool
Strategic <b>roadmaps</b> towards the integration of geothermal energy in heating and cooling networks	Report / Tool	Stakeholder <b>trainings and tutorials</b>	Trainings
Dedicated <b>web portal and digital communication</b> campaigns	Tools	Targeted events introducing the annual <b>'Geothermal DHC day' event</b>	Events

## Why getting involved into SAPHEA

- All outputs of SAPHEA including the digital decision support and strategic planning tools will cover all Europe on a basic level of detailed by **adapting existing toolboxes**,
- All outputs will be tested in pre-defined **'project study areas'** in Austria, Germany, Denmark, Poland, Italy, France and the UK while distinguishing between **'lighthouse-'** and **'challenge regions'**
- We invite energy suppliers, communities and municipal energy planners from all across Europe to become a **'follower study area'** of SAPHEA and test the developed tools and to support fact finding missions
- SAPHEA furthermore aims at building up a **network of competence and interest** on the use of geothermal energy in heating and cooling networks in Europe – we offer various physical and digital activities to get involved into **fact finding and knowledge transfer missions** for improving the framework of 'geoHC networks' in Europe
- SAPHEA will further capitalize the existing, pan European research network of the EU COST Action **'Geothermal-DHC'** – for more information please visit [www.geothermal-dhc.eu](http://www.geothermal-dhc.eu)

For more information on SAPHEA and your possible involvement into the project, please contact the coordinator, **Gregor Goetzl** (Geological Survey of Austria), at [gregor.goetzl@geologie.ac.at](mailto:gregor.goetzl@geologie.ac.at).

