



1st Joint mobilization and mutual learning (MML) online workshop

“Sustainable Heating & Cooling Solutions for Industries and District Heating”

Date: 21 October 2025

Duration: 3 hours

Time: 10:00 CET

Organizational Committee:
GEOSYN in collaboration with
Geo-Cluster partner projects

The 1st Joint Mobilization and Mutual Learning (MML) Workshop is organized by the GEOSYN project in collaboration with GEOS-Techis, GEOFLEXHEAT, FlexGeo, TREASURE, HOCLOOP, USES4HEAT, INTERSTORES, URGENT, CoolLIFE, and RE-WITCH as part of the Geo-Cluster initiative.

This event aims to foster knowledge sharing, cross-project collaboration, and mutual learning, with a strong focus on innovative sustainable heating and cooling solutions for industrial applications and district heating. Key themes include geothermal energy, thermal energy storage, advanced heat pump technologies, and their policy and market integration pathways.

The workshop forms part of a broader effort to accelerate the deployment of clean heat solutions across Europe and to support the decarbonization of energy systems in line with EU climate goals..

Geo-Cluster



GEOS-TECHIS



URGENT



TREASURE

FlexGeo



USES4HEAT



RE-WITCH
The coolest cold from the cleanest heat



Cool LIFE



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“Sustainable Heating & Cooling Solutions for Industries and District Heating”

Workshop Agenda

21 October 2025 - 10.00 CET

Presentation: max 10 min

TIMING	PRESENTATION	SPEAKER
10:00 – 10:10	Welcome and Introduction	
10:10 – 11:30	THEMATIC SESSION 1 <i>Geothermal Innovations and Advanced Thermal Energy Storage for Industrial Decarbonization</i>	
10:10 – 10:20	<i>From Earth to Industry: Geothermal Solutions for Sustainable Heating and Cooling</i>	GEOSYN LORENZO TALLURI, PhD, Researcher, University of Florence, Italy
10:20 – 10:30	<i>A general presentation of the GeoS-TECHIS project</i>	GEOS-TECHIS ANXO PARDIÑAS, itg technology centre
10:30 – 10:40	<i>Development of a reduced-order dynamic model for large-scale seasonal thermal energy storage applications</i>	INTERSTORES MICHAEL BAYER, Research Associate, HSLU (Lucerne University of Applied Sciences and Arts - Institute of Building Technology and Energy IGE), Switzerland
10:40 – 10:50	<i>Heat-to-cold industrial solutions (advanced thermally-driven industrial cooling technologies based on Adsorption and Absorption processes driven by an optimized mix of low-grade waste and renewable sources)</i>	RE-WITCH ANDREA FRAZZICA, CNR
10:50 – 11:00	<i>Implementation of an expanding thermal source network as a step towards a CO₂-neutral industry</i>	INTERSTORES SIMON MÜLLER, PhD Fellow / Research Associate for Renewable Energy Systems, THI(Technische Hochschule Ingolstadt), Germany
11:00– 11:10	<i>Closed loop deep geothermal solution</i>	HOCLOOP OLA VESTAVIK, Geotherma, Norway
11:10– 11:20	<i>Decarbonising Heat: How seasonal storage can power the clean energy transition</i>	USES4HEAT CONNIE OCANDO, PhD Project Officer, Euroheat & Power
11:20– 11:30	Q&A	
11:30– 11:40	Coffee Break	

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11:40 – 13:00	THEMATIC SESSION 2 <i>Methodologies, Prototypes, and Policy Outlook of Clean Heat Solutions</i>	
11:40 – 11:50	<i>Preliminary dynamic modelling of the GEOSYN high temperature heat pump and its application in rubber Industry</i>	GEOSYN VAISHAK SOMASUNDARAM , Postdoc, Institute of Mechanical and Electrical Engineering / SDU Mechatronics (CIM), University of Southern Denmark, Sønderborg
11:50 – 12:00	<i>The GeoS-TECHIS prototype for industrial heating and cooling</i>	GEOS-TECHIS KRZYSZTOF BANASIAK, SINTEF
12:00 – 12:10	<i>Geothermal exploration solutions for urban context (Sustainable and affordable URban Geothermal Exploration Novel Technologies and workflows)</i>	URGENT VIRGINIE HARCOUËT-MENOU, VITO (Flemish Institution for Technological Research)
12:10 – 12:20	<i>LCA and SLCA methodology definition for decarbonization projects in industries</i>	GEOS-TECHIS ELOY ÁLVAREZ and DANIEL ALIAS, LEITAT
12:20 – 12:30	<i>Clean Heat Solutions: a market and policy outlook</i>	GEOFLEXheat MARTINA BATTOCCHIO, European Heat Pump Association (EHPA)
12:30– 13:00	<i>Q&A and Closing remarks</i>	

APRE



UNIVERSITÀ DEGLI STUDI DI FIRENZE

DIEF
DIPARTIMENTO DI INGEGNERIA INDUSTRIALE



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“Geothermal Heating & Cooling for Industry



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