

Invitation to the first Geothermal-DHC regional cluster workshop

“Geothermal energy – unleashing the potential of supplying district heating and cooling networks in the Baltics”



Date and time of the workshop: 30th of September 2022, 09:00 am – 16:00 am (CEST)

Location: Riga, Latvia

Registration: <https://form.jotform.com/221452253131341>

About the workshop

Geothermal energy offers many advantages for the clean and sustainable energy transition by covering the demand of low temperature heat 10°C up to 150°C. Geothermal energy is a long-term stable and reliable heat source providing high system efficiencies and low surface space occupation. However, the overall share of geothermal inside the H&C market is still less than 2%, and in the Baltics almost negligible.

Our workshop focuses on a science to policy and industry dialogue on the opportunities and prevailing barriers towards a better integration of geothermal energy in multivalent heating and cooling networks at various temperature levels. These sessions will cover presentations regarding the state of the art in the Baltic countries and sharing the experience and consultancy on the introduction of geothermal energy followed by a moderated panel discussion focusing on strategies and needed measures to better integrate this technology into the DHC market in the Baltic region. Event will be held in a hybrid mode (in person and online).

Preliminary program of the workshop

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| 8:30 | Registration and get together |
| 9:00 | <p>Opening of the workshop and welcome addresses</p> <p>Riga Technical University</p> <p>COST Action Geothermal-DHC: Gregor Goetzl (chair)</p> |
| 9:30 –
12:00 | <p>Morning session – technical lectures on low temperature heating and cooling grids in context of shallow geothermal</p> <p>Invited speakers will share theoretical and practical experience on:</p> <ul style="list-style-type: none"> • low-temperature heating and cooling grids • multivalent heating and cooling grids using underground heat storage • geothermal DHC lighthouse projects and 5GDHC • economic aspects and business models |

Confirmed speakers: Rao Martand Singh (NTNU, Norway), Peter Altenberg (The Heat Academy, Sweden)



Each lecture is scheduled for 30 minutes including Q&A round

12:00

Lunch break

13:00 –

Open forum on policies and R&I linked to geothermal energy use in the Baltic region

15:20

Local research and energy industry stakeholders will present the state of the art and future development challenges of the DHC networks and energy infrastructure in the Baltic region. Topics will cover:

- State of the art of DHC networks
- Geothermal potential in Baltic region
- Lessons learned from existing geothermal case studies
- New business opportunities and challenges for existing energy infrastructure

Each lecture 20 minutes

15:20 -

Panel discussion: “Pathways to introduce geothermal energy supported DHC networks and use of geological potential in heating sector”

16:00

All speakers will be involved.

** Speakers and topics TBC and subject to change*

Participating at the workshop is free of charge.

Contributions from Baltic region countries* are encouraged! The contribution can be in form of poster or oral presentation and must be related to the topic of “Geothermal energy use for heating and cooling in the Baltic region”. Application for the contribution must be indicated within the registration form. Number of accepted applications is not limited. Certain budgetary constraint for reimbursement of travel expenses will be considered after the end of registration period.

*Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden

Linked event: 5th International Conference “Innovative Materials, Structures and Technologies” (IMST 2022), 28 – 30 September

This workshop is a side event to the 5th International Conference “Innovative Materials, Structures and Technologies” (IMST 2022) organized by Faculty of Civil Engineering of Riga technical University. <https://imst.rtu.lv/important-dates/> IMST 2022 to be held in Riga on 28th-30th September 2022. Conference is organized by Faculty of Civil Engineering, RTU in collaboration with EIT RawMaterials Baltic HUB.

The conference aims to promote and discuss the latest results of industrial and academic research on analysis and design of advanced structures and buildings; innovative, ecological and energy efficient building materials; development of maintenance, inspection and monitoring methods; structural management; sustainable and safe transport infrastructure. The conference is intended for scientists, engineers, students, managers and professionals of the construction sector providing a possibility to share the latest achievements, discuss recent advances and highlight the current challenges. All accepted abstracts will be included in the printed conference abstract book. Full papers will be peer-reviewed, and the accepted papers are planned to be published in IOP Conference Series: Material Science and Engineering indexed by SCOPUS and Web of Science.

Conferences participation fees starts from 250 Euro.



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Registration to the 5th International Conference “Innovative Materials, Structures and Technologies”: <https://imst.rtu.lv/registration-to-imst2022/>