

GeoThermal Bridge Initiative

Geothermal Knowledge Exchange Between Iceland & Romania

Final Event for the Programmes on Energy and Business Innovation
Bucharest, Romania 25th of March 2025

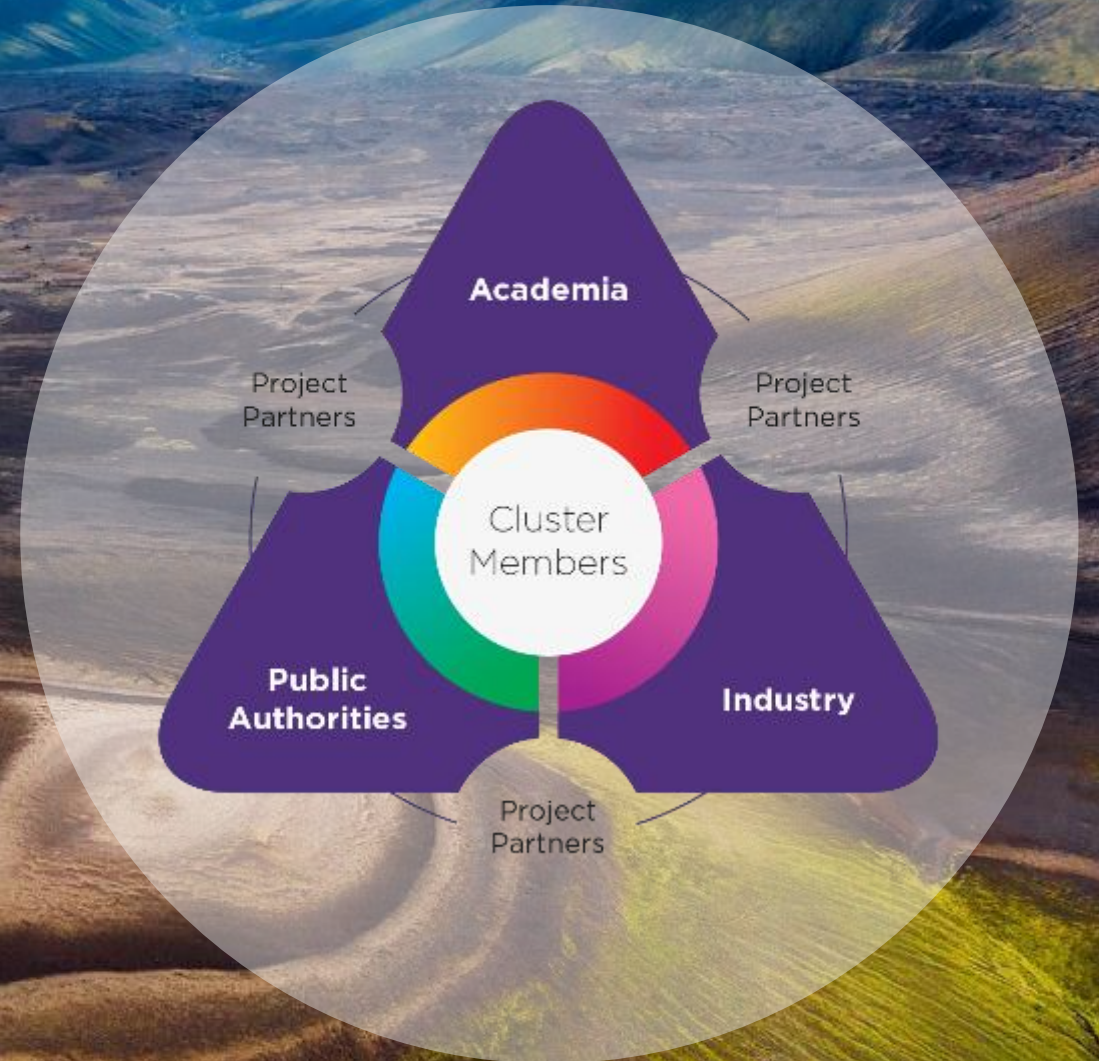


GEORG

Geothermal Research Cluster

Collaboration platform that
builds bridges between
**Research, Industry & Public
Authorities**

International geothermal
projects supporting the
Energy Transition





GeoThermal Bridge Initiative

- Bilateral project between Iceland and Romania
- Supported by EEA & Norway Grants and Innovation Norway
 - Part of the Energy Programme Romania that aims to reduce carbon intensive energy and strengthen energy security
- Project partners
 - National Energy Authority of Iceland (Orkustofnun)
 - GEORG Geothermal Research Cluster
 - Executive Agency for Higher Education, Research, Development, and Innovation Romania (UEFISCDI)

Objectives



Knowledge Transfer & Capacity Building

Organize workshops in Romania
Study visit for Romanian experts to Iceland



Promoting R&D & Technological Advancement

Facilitate joint R&D projects
Explore international funding schemes



Building Long-term Strategic Cooperation

Establish strategic frameworks
Participate in international forums

Justification

Strategic Partnership:

Leverage Iceland's geothermal expertise to support Romania's energy development

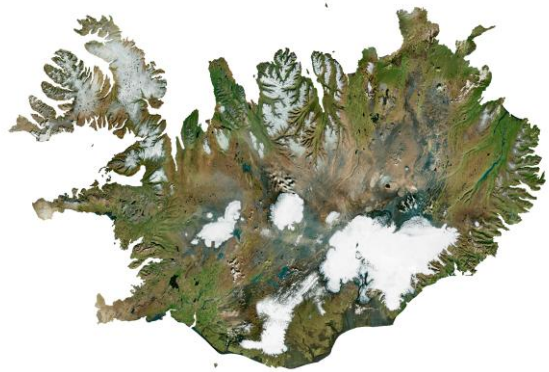
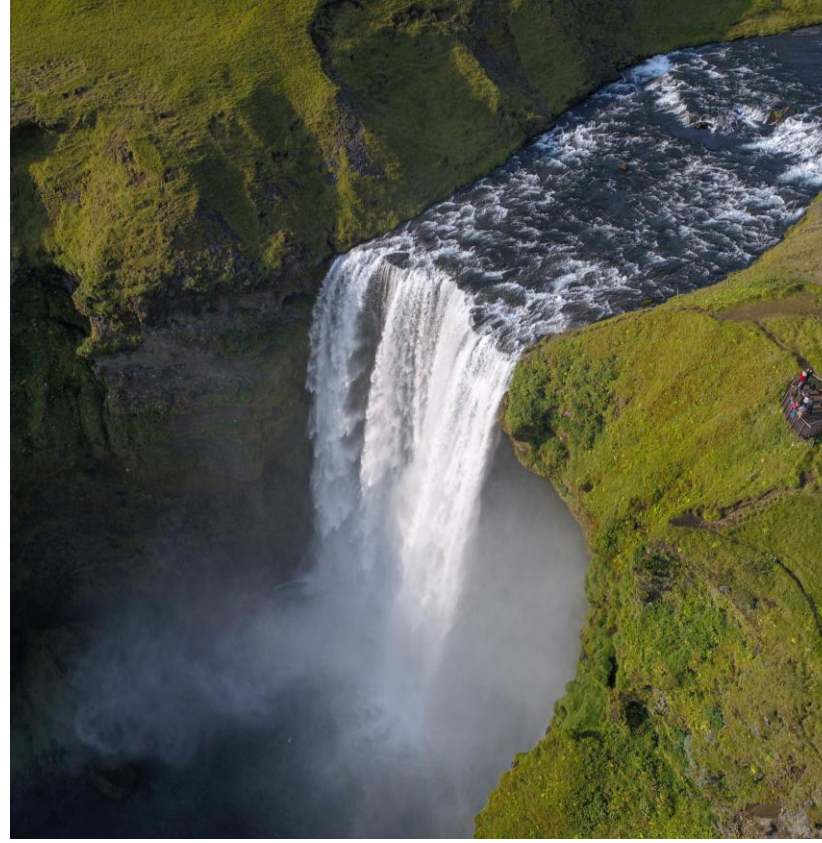
Global Energy Transition:

Align with international goals for renewable energy and climate action

Mutual Benefits:

Enhance technology transfer, innovation, and policy development





In Iceland there is a long tradition of cooperation between different sectors to accelerate renewable energy development

- 99,9% of electricity produced is from renewables
- 90% of houses are heated with geothermal energy
- 85% of primary energy comes from renewables

Geothermal Energy is an Important Part of the Energy Transition

- Produces reliable baseload power and heat
- Important to balance intermittent supplies from other renewable energy sources
- Indigenous source of energy and contributes to security of energy supply



Indicators & Outcomes

Participants

10-15 experts & organizations from Romania & Iceland

Deliverables

Final report
Identify 4 R&D projects
Articles published in both countries
Study visit of Romanian delegates to Iceland

Satisfaction Level

High satisfaction anticipated through effective communication and tangible outcomes

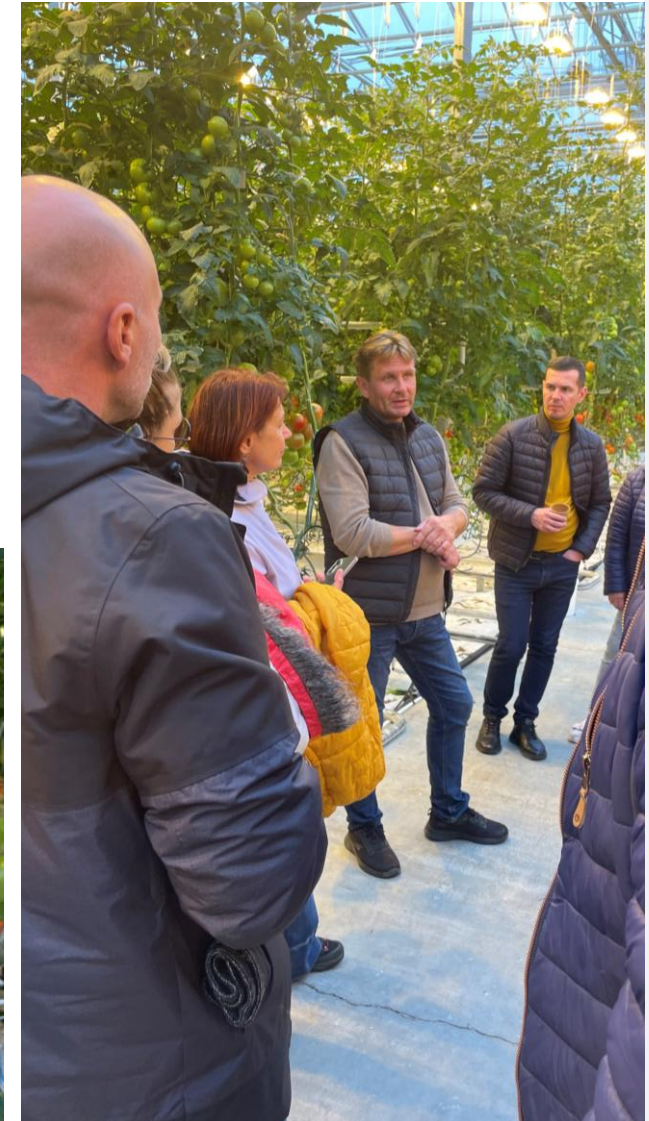
Project Launch

- UEFISCDI organized a meeting in Bucharest to launch the project on the 26th of June 2024
- The purpose of the meeting was to identify potential areas of collaboration between the partners
- UEFISCDI and GEORG selected experts to participate in the project based on the criteria identified in the meeting



Study Visit in Iceland September 2024

- A delegation of experts from Romania representing industry, academia, and public authorities travelled to Reykjavik
- The objective of the trip was to learn about the geothermal sector in Iceland, exchange ideas with peers, and prepare new projects to further collaboration between the two countries



Study Visit in Iceland September 2024

- A workshop was organized by GEORG on the 3rd of September in Reykjavik where the Icelandic experts introduced their fields of expertise
- The group went on a field trip on the 4th of September to the South of Iceland where geothermal sites were visited
- The visit concluded with a meeting on the 5th of September to discuss the results of the trip



Workshop in Bucharest October 2024

- A delegation of experts from Iceland travelled to Bucharest to identify and discuss six new projects on the development of geothermal energy in Romania with the Romanian participants in the project



Workshop in Bucharest October 2024

- UEFISCDI hosted a workshop on the 15th and 16th of October
- On the 17th of October UEFISCDI organised a field trip to visit a geothermal installation that had been funded by EEA grants in Balotesti, and a swimming pool complex in Otopeni that has the potential to utilize geothermal energy to heat their pools



Workshop in Oradea 2025

- Experts from Romania and Iceland travelled to Oradea to participate in the final workshop of the project on the 28th and the 29th of January
- The first day of the workshop focused on knowledge-exchange and potential projects
- The group also visited geothermal installations that utilize low-temperature geothermal energy for district heating



Workshop in Oradea 2025

- The second day focused on regional and international collaborations
- Representatives from Poland and the GEOTHERMICA Initiative also participated
- There was considerable interest amongst participants to work on projects related to the utilisation of low-temperature geothermal energy, value creation, and education



Iceland
Liechtenstein
Norway grants

Norway
grants

Supported by the peoples of
Iceland, Liechtenstein and Norway through the EEA Grants.
„Valorificarea energiei geotermale în asociere cu agent termic primar, pentru
producerea agentului termic pentru încălzire și apă caldă în zona loșia Sud”

Potential Projects & Working Groups

- **Legal & Regulatory Framework**
 - Regulatory framework for exploration and exploitation of geothermal energy
 - Exploitation rights of wells
 - Access to information
 - **Social License to Operate – Public Perception & Engagement**
 - Public perception on geothermal energy
 - Social awareness campaign and events for stakeholders
 - Map socio-economic factors of geothermal energy
 - Education material
 - **Capacity Building Programs**
 - Resource mapping – Geological Institute of Romania looking to map geological resources
 - Exploration techniques
 - Mobility projects to train Romanian professionals (ISOR, GRO GTP, Reykjavik University)
 - Exchange programs and internships
 - **Value Creation & Economic Development – Geothermal Energy Utilization**
 - Food production – geothermal greenhouses, aquaculture
 - Tourism – spas, pools, recreational sites
 - Industrial park – economic development (Beius)
 - Socio-economic research
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Potential Projects & Working Groups

- **District Heating**

- Utilize geothermal energy for district heating in Geoagiu, Oradea, Otopeni

- **Research Collaboration**

- Exchange programs for faculty and students
- Master programs and joint degrees

- **Projects Proposals / Potential Projects**

1. LIFE24-CET-STARTS – “Sustainable Transition to Advanced Renewable Thermal Systems”
 - Utilizing geothermal energy for district heating systems in the Westfjords, Beius, and Zyrardow
 - Submitted in 2024 with partners from Iceland, Romania, and Poland
2. ERASMUS+ – “Enhancing Renewable Energy Master’s Curricula to Develop Soft Skills”
 - Capacity building for students and educators on renewable energy
 - Submitted in 2025 with partners from Romania, Iceland, and Germany
3. Exploration and exploitation of geothermal water (Otopeni, swimming pool complex)
4. Feasibility study on geothermal resources and business plan (Geoagiu, value creation)
5. Develop legal and regulatory framework on national for geothermal resources for Romania
6. Utilize low-temperature geothermal energy for district heating (Westfjords, Beius, etc)
7. Socio-economic study of geothermal energy usage and social awareness campaign
8. Value creation using geothermal energy for food production, tourism, industry, etc

Thank you!



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