Project idea form - small projects

Version 2.1

Registration no. (filled in by MA/JS only) _____

Project Idea Form

Date of submission 05/06/2025

1. Project idea identification

Project idea name	GeoHeatActivate BSR: Accelerating Geothermal Energy and Heat Pump Implementation in Estonian and Latvian Municipalities with Danish Best Practice Support
Short name of the project	GeoHeatActivate
Previous calls	yes ◯ no ◉
Seed money support	yes ◯ no ◉

2. Programme priority

	3. Climate-neutral societies

3. Programme objective

	3.2. Energy transition

4. Potential lead applicant

Name of the organisation (original)	Eesti Linnade ja Valdade Liit
Name of the organisation (English)	The Association of Estonian Cities and Municipalities
Website	https://www.elvl.ee/aecm
Country	EE

Type of Partner	Regional public authority
	regional council, etc.
Contact person 1	
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Which organisation(s) in the planned partnership take part in a project within the Interreg Baltic Sea Region Programme for the first time? Please list the respective partners.

OÜ Steiger (Estonia) - Engineering company specializing in geothermal drilling
Estonian Heat Pump Association (ESPL) (Estonia) - Industry association new to Interreg BSR
Latvian Association of Local and Regional Governments (LARGL) (Latvia) - While experienced in municipal cooperation, first time in Interreg BSR
VIA University College (Denmark) - Academic institution bringing Danish geothermal expertise

5.1 Specific challenge to be adressed

Municipal authorities and energy specialists in Estonia and Latvia lack practical knowledge and capacity to implement geothermal energy and advanced heat pump technologies for district heating systems. This knowledge gap includes:
- Limited understanding of local geothermal potential assessment methodologies
- Insufficient technical expertise for integrating geothermal solutions with existing district heating infrastructure
- Lack of practical implementation models and financial frameworks adapted to small and medium-sized municipalities
- Limited awareness of successful large-scale implementations in Nordic countries
- Absence of regional cooperation networks for knowledge sharing

The target groups facing these challenges include:
1. Municipal energy planners and decision-makers responsible for district heating infrastructure
2. District heating operators seeking sustainable alternatives to fossil fuels
3. Energy consultants and engineers requiring BSR-specific implementation knowledge

4. Regional development agencies working towards climate neutrality goals
5. Housing associations and building owners in communities served by district heating

Our project addresses these challenges by establishing systematic knowledge transfer from Denmark's advanced geothermal implementations to Estonian and Latvian contexts, developing practical assessment tools, and creating replicable implementation models for small-scale geothermal district heating projects.

5.2 Focus of the call

Our project directly supports cohesive development of small places and rural areas facing energy transition challenges. We specifically target small and medium-sized municipalities (2,000-20,000 inhabitants) where district heating systems serve residential areas but rely heavily on fossil fuels or biomass.

Many Baltic Sea region municipalities experience:
- High heating costs burdening residents and local budgets
- Aging district heating infrastructure requiring modernization
- Limited technical and financial capacity for energy transition
- Population decline requiring more efficient, sustainable heating solutions

Our geothermal and heat pump solutions will:
- Reduce long-term heating costs for communities
- Create local green jobs in installation and maintenance
- Provide replicable models for resource-limited municipalities
- Build regional technical expertise through capacity building
- Strengthen energy security and independence from fossil fuel imports

By implementing our systematic approach across Estonia, Latvia, and Denmark, we enable small communities to access advanced sustainable heating technologies previously available only to larger cities, ultimately supporting more resilient and sustainable rural communities across the Baltic Sea region.

6. Transnational relevance

Accelerating geothermal energy adoption in Baltic municipalities requires transnational cooperation for several critical reasons:
1. Technology and knowledge transfer:
Denmark has advanced significantly in large-scale geothermal implementations and heat pump integration, while Estonia and Latvia have substantial untapped geothermal potential but limited practical experience. Transnational cooperation enables systematic transfer of Danish technical expertise and implementation models.
2. Comparable geological and climatic conditions:
The Baltic Sea region shares similar geological formations and heating demands, making Danish solutions adaptable to Estonian and Latvian contexts. However, local adaptations require collaborative

assessment and development.
3. Scale and expertise pooling:
Individual countries lack the comprehensive expertise needed - Danish academic institutions provide geothermal science, Estonian companies offer drilling expertise, Latvian experience in district heating management, and industry associations bring practical implementation knowledge. Only transnational cooperation can combine these complementary competencies.
4. Regional market development:
Creating a regional knowledge network and implementation capacity supports the development of a Baltic geothermal energy market, making technologies more accessible and cost-effective across borders.
5. Policy and regulatory alignment:
Harmonizing approaches to geothermal energy development across the region requires coordinated policy development and best practice sharing that transcends national boundaries.

This collaborative approach creates lasting institutional relationships and knowledge networks that will continue supporting regional energy transition beyond the project timeframe.

7. Specific aims to be adressed

Building trust that could lead to further cooperation initiatives
Our project builds trust among municipal authorities, energy specialists, and industry stakeholders by creating a collaborative platform for knowledge exchange and joint problem-solving. Through successful implementation of pilot project preparations and demonstrated Danish-Baltic cooperation, we establish relationships and confidence that will lead to future joint geothermal development projects and continued technical cooperation.
Initiating and keeping networks that are important for the BSR
The project establishes the "Baltic GeoEnergy Hub" - a sustainable network connecting municipalities, energy companies, academic institutions, and industry associations across the BSR. This network will continue facilitating knowledge sharing, project development support, and policy coordination on renewable heating solutions after the project ends, supporting ongoing regional energy transition goals.
Bringing the Programme closer to the citizens
By focusing on practical heating solutions that directly impact residents' daily lives and heating costs, our project demonstrates tangible EU benefits to citizens. Community engagement activities, local implementation examples, and visible infrastructure improvements help residents connect EU funding with improved quality of life, reduced energy costs, and environmental benefits in their communities.
Allowing a swift response to unpredictable and urgent challenges
The ongoing energy crisis and accelerating climate change create urgent needs for heating alternatives in vulnerable communities. Our project provides swift, practical solutions by leveraging existing Danish expertise and regional technical capacity to help communities rapidly develop sustainable heating alternatives, reducing dependence on volatile fossil fuel markets and contributing to regional energy security.

8. Target groups

1. Local and regional authorities: Municipal governments, regional development agencies, and local energy planners responsible for district heating infrastructure decisions. They have authority to implement energy transitions and will benefit from practical assessment tools, implementation models, and capacity building. Their involvement is essential for scaling project results.

2. Infrastructure and public service providers: District heating companies, municipal energy utilities, and facility managers operating heating systems in small and medium-sized communities. Their technical knowledge informs feasible solution development, while they directly benefit from modernization approaches and efficiency improvements.

3. Sectoral agencies: Regional energy agencies, environmental authorities, and climate action coordinators with expertise in sustainable energy and responsibility for regional climate goals. They contribute policy knowledge and regulatory expertise while gaining tools for supporting local energy transitions.

4. Interest groups: Housing associations, building cooperatives, and facility management organizations representing residents and building owners who face high heating costs. Their participation ensures solutions address end-user needs and gain community acceptance.

5. Higher education and research institutions: Universities and research centers studying renewable energy technologies, geothermal systems, and sustainable heating in northern climates. They provide scientific validation, research capacity, and contribute to knowledge development and dissemination.

	Please use the drop-down list to define up to five target groups that you will involve through your project's activities.	Please define a field of responsibility or an economic sector of the selected target group	Specify the countries and regions that the representatives of this target group come from.
1.	Local public authority	Municipal energy planning and district heating management	Estonia (all regions), Latvia (all regions), Denmark (Central Jutland)
2.	Infrastructure and public service provider	District heating operations and energy utilities	Estonia (all regions), Latvia (all regions), Denmark (selected municipalities)
3.	Sectoral agency	Regional energy and climate policy	Estonia, Latvia, Denmark (regional energy agencies)

4.	Interest group	Housing associations and building management cooperatives	Estonia, Latvia (focus on municipalities with district heating)
5.	Higher education and research institution	Renewable energy and geothermal technology research	Denmark (VIA University College), Estonia, Latvia

9. Contribution to the EU Strategy for the Baltic Sea Region

Please indicate if your project idea has the potential to contribute to the implementation of the Action Plan of the EU Strategy for the Baltic Sea Region (https://eusbsr.eu/implementation/).

yes ◉ no ◯

Please select which policy area(s) of the EUSBSR your project idea contributes to most.

PA Energy

PA Innovation

The MA/JS may share your project idea form with the respective policy area coordinator(s) of the EUSBSR. You can find contacts of PACs at the EUSBSR website (https://eusbsr.eu/contact-us/).

☐ If you disagree, please tick here.

10. Partnership

Our partnership combines complementary expertise from municipal authorities, technical specialists, industry associations, and academic institutions across three Baltic Sea countries:

1. Association of Estonian Cities and Municipalities (AECM) - Lead Partner, Estonia
AECM coordinates the project and provides access to its network of 78 Estonian municipalities. As the representative of local authorities, AECM ensures solutions address real municipal needs and facilitates knowledge transfer among Baltic municipalities. AECM will lead stakeholder engagement and policy recommendation development.

2. Estonian Heat Pump Association (ESPL) - Estonia
Industry association bringing practical heat pump implementation experience and technical standards. ESPL leads capacity building activities and contributes to guideline development, ensuring solutions meet industry best practices and market realities. They provide training expertise and industry network access.

3. OÜ Steiger - Estonia
Engineering company with specialized expertise in geothermal drilling and heat pump technology. Steiger provides technical knowledge for geothermal potential assessment and digital twin development, contributing experience from Estonian geothermal projects including ongoing drilling initiatives.

4. Latvian Association of Local and Regional Governments (LARGL) - Latvia
Represents 120+ Latvian municipalities and provides access to local authorities facing similar heating challenges. LARGL ensures project relevance to Latvian contexts and facilitates implementation of capacity building activities in Latvia, contributing municipal expertise in district heating management.

5. VIA University College - Denmark
Academic institution providing scientific expertise in sustainable energy systems and access to Denmark's advanced geothermal implementations. VIA leads best practice analysis, contributes to technical assessment methodologies, and provides access to Danish case studies and expertise networks.

This partnership represents different advancement levels in geothermal implementation - from Denmark's leadership experience to Estonia and Latvia's emerging potential - enabling effective knowledge transfer and practical solution development.

11. Workplan

Our project implements systematic knowledge transfer and capacity building through four integrated work packages:

WP1: Assessment, Mapping and Best Practices (Months 1-8)
We develop standardized methodologies for assessing geothermal potential and existing district heating systems in small municipalities. VIA University College leads comparative analysis of successful Danish implementations, while Steiger and ESPL conduct technical assessments in 3-5 selected Estonian and Latvian municipalities identified through AECM and LARGL networks. Target groups (municipal authorities and energy agencies) participate through workshops and site evaluations.

WP2: Knowledge Transfer and Capacity Building (Months 4-18)
We organize systematic learning exchanges including study visits to successful Danish geothermal installations led by VIA University College, where participants experience working solutions firsthand. ESPL and AECM conduct regional seminars in Estonia and Latvia for municipal decision-makers, energy specialists, and district heating operators. Online webinar series covers specific technical topics led by respective expert partners.

WP3: Guidelines and Pilot Project Preparation (Months 7-22)
Steiger and ESPL develop practical implementation handbooks for municipalities and technical guides for engineers, while AECM and LARGL ensure user-friendliness and policy relevance. We prepare detailed pre-feasibility studies for 2-3 most promising municipalities selected from WP1 assessments, providing them with concrete next steps toward implementation.

WP4: Network Creation and Policy Recommendations (Months 1-24)
ESPL leads establishment of the "Baltic GeoEnergy Hub" platform for ongoing knowledge sharing beyond project duration. All partners contribute to developing policy recommendations addressing regulatory and administrative barriers identified through project activities. A final conference presents results to broader stakeholder community.

Primary outputs (implementation handbooks, technical guides, pre-feasibility studies) will be used by municipalities for decision-making and project development. Energy specialists gain practical tools and methodologies, while housing associations receive simplified guidance on sustainable heating options for their communities.

12. Planned budget

ERDF budget (planned expenditure of partners from the EU)	EUR 500,000.00
Norwegian budget (planned expenditure of partners from Norway)	EUR 0.00
Total budget (including preparatory costs)	**EUR 500,000.00**

13. Project consultation

Please indicate if you wish to have a consultation (online meeting) with the MA/JS to discuss your project idea

yes ◉ no ◯

14. Questions to the MA/JS

Questions related to the content of the planned project	1. Should we include specific quantitative targets for geothermal potential assessment (e.g., MW capacity identified) or keep outputs qualitative for a small project? 2. What level of detail is expected for the pre-feasibility studies - should they include full geological surveys or preliminary assessments sufficient for investment decisions? 3. Are there examples of successful BSR small projects combining Danish expertise with Baltic implementation that we could learn from? 4. How should we balance knowledge transfer activities with practical implementation preparation given the 24-month timeframe? 5. Should the "Baltic GeoEnergy Hub" be designed as a formal network structure or rather as an informal cooperation platform?
Questions related to budgeting and expenditure	1. For international study visits to Denmark, what portion should be allocated under staff costs versus the 40% flat rate for travel and accommodation? 2. Can external geological expertise for geothermal assessments be

	covered under staff costs if provided by partner organizations? 3. What documentation is required for VIA University College as a Danish academic partner regarding co-financing capacity? 4. Are there specific requirements for budget distribution among work packages that would strengthen our application? 5. Should website development and platform creation costs be included in the 40% flat rate or considered separately?
Any other questions	1. What level of municipal commitment letters should we obtain - formal endorsements or expressions of interest? 2. Should we have pre-agreements with the 3-5 municipalities for site assessments before application submission? 3. Is there preference for geographical distribution of pilot municipalities across different regions in Estonia and Latvia? 4. What sustainability indicators should we define for measuring the success of knowledge transfer activities? 5. How should we document the continuation plan for the Baltic GeoEnergy Hub beyond project completion?

15. Additional information

Our project leverages Denmark's world-leading geothermal experience to accelerate sustainable heating adoption in Estonian and Latvian municipalities. The partnership strategically combines Danish scientific expertise (VIA University College), Estonian technical capacity (Steiger, ESPL), and municipal networks (AECM, LARGL) to create practical, replicable solutions.

By focusing on small municipalities lacking independent energy transition resources, we address a critical gap while enabling access to sustainable heating technologies previously available only to larger cities.

The project aligns with EUSBSR PA Energy objectives and all partners have confirmed their commitment and capacity.

Your account in BAMOS+

Please remember that to officially submit your application you need to access our electronic data exchange system BAMOS+. More information about the process of applying for your account in BAMOS+ you will find here:
https://interreg-baltic.eu/gateway/bamos-account