



Plattform Environmental Technology

- a strong network for the environment -



Project "Geothermal District Heating in Romania"

Occasion:

- The municipality of Lovrin would like to set up a district heating company to supply the population and agriculture (e.g. greenhouses) with heat at low cost.
- In this context, this municipality would like to use the existing geothermal boreholes in the future and set up a modern district heating system.
- Optimization of the district heating operation in the municipality of Lovrin and development of the basis for an environmentally sound and sustainable development of the district heating operation of the municipality of Lovrin from geothermal resources.



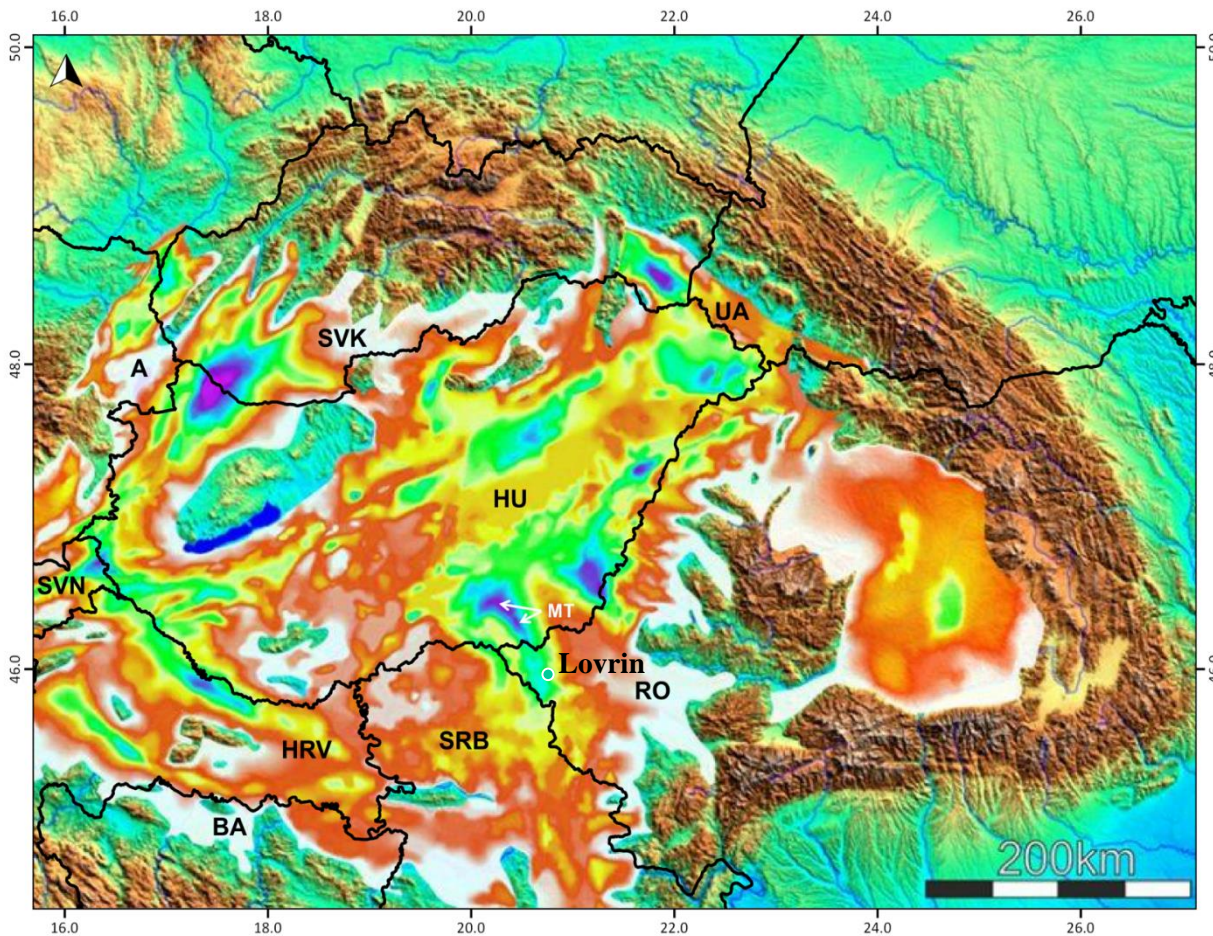
Project "Geothermal District Heating in Romania"

Aims:

- Optimization of the existing district heating operation in the municipality of Lovrin.
- Elaboration of the basis for a district heating operation of the Lovrin municipality from geothermal resources or development a district heating concept with recommendations for action.
- Deduction of a guideline for action, which can also be used by other municipalities for implementation of a geothermal local and district heating supply.
- Preparation of feasibility studies so that the community can be prepared for the later can submit corresponding applications for funding from EU funds for large-scale implementation.



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Link to EUSDR (EU Strategy Danube Region):

- This project has a lighthouse character for other municipalities, as there is a lot of unused potential in geothermal energy in this region.
- There are also cross-border opportunities to participate in the results of the feasibility study (Hungary, Serbia – entire Pannonian basin)



Developed proposals for the operator model

The choice of the operator model depends on various local conditions, e.g. the user structure (number of properties to be supplied, individual consumers, large consumers). Different models are available for individual testing of their advantages and disadvantages.

1. Own operation (municipality, investor) with connection of own and external real estate.
2. Joint operation within energy production communities or cooperatives (e.g.: citizens' energy cooperatives).
3. Contracting (heat procurement via heat supply contracts).



Summary/conclusion

- From the point of view of climate protection, heating networks are one of the important factors in implementing energy system transformation in the heating sector. In the energy supply in the private, public and commercial sector, heating networks are characterized by the fact that they can be operated flexibly and easily converted - both with fossil and renewable energy.
- With the construction of a heating network in Lovrin, functional connections between different buildings are created that did not exist before the network was built. These functional relationships must be taken into account during the planning phase in order to ensure the economic viability of the network over a payback period of 15-20 years.
- Planning and long-term economic operation therefore require a careful spatial and time-related actual analysis of the energy situation in the municipality.



Summary/conclusion

- In addition, the development prospects for the next 15-20 years are to be assessed about changing energy requirements, for example due to changes in use or energy-efficient renovations, to be considered in the calculation.
- The inclusion of combined heat and power generation can be an interesting alternative to decentralized individual solutions, both ecologically and economically.
- Heating networks are a key factor where their use technically feasible and economically sensible, is an important component in the local and regional climate protection strategy.



Support

- This project was successfully completed and received substantial financial support from the State Ministry Baden-Württemberg.
- The Ministry for the Environment, Climate Protection and the Energy Sector Baden-Württemberg provided us with technical support.



Baden-Württemberg
STAATSMINISTERIUM



Baden-Württemberg
MINISTRY OF THE ENVIRONMENT, CLIMATE PROTECTION
AND THE ENERGY SECTOR



Many thanks for your attention!

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