

Project Area



TRANSENERGY's final goal is to provide a user friendly, interactive web based decision supporting tool which transfers expert know how of sustainable utilization of geothermal resources in the western part of the Pannonian basin.

Targeted stakeholders are primarily authorities and investors, who will get a regional evaluation of geothermal resources of the project area. Assessment will be done by various geological, hydrogeological and geothermal models at a supra-regional scale and on five selected cross-border pilot areas with different geothermal settings, where already existing utilization problems have been identified.

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Project duration: April 1, 2010 - March 31, 2013.

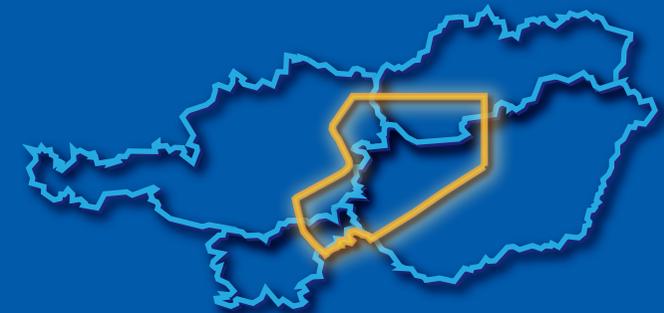


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DEVELOPMENT FUND

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF

Transenergy

Transboundary Geothermal Energy Resources of Slovenia, Austria, Hungary and Slovakia



A common geothermal information system in four countries of Central Europe

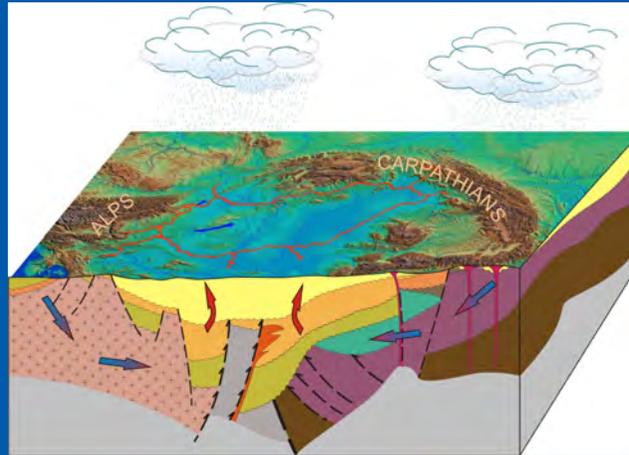
Background and Challenges

Worldwide there is a growing need for the enhanced use of renewable energies due to the continuously increasing energy demand. This is underlined by the restricted reserves of fossil fuels and their uneven occurrences threatening the security of supply. Furthermore anthropogenic emission of carbon-dioxide resulting from the burning of oil, gas and coal affects the climate system of the Earth.

By fostering the sustainable utilization of geothermal energy in the western part of the Pannonian basin and its surroundings, TRANSENERGY project supports the serious international efforts to increase the proportion of renewables in the energy mix (e.g. Kyoto Protocol, EU COM[2006]848). Moreover it contributes to the Lisbon Strategy by introducing new implementations and potential investments in the geothermal energy sector leading to the increasing competitiveness of the region. The project results also supplement the Cohesion Policy by strengthening territorial cooperation among the participating countries/regions.



Transboundary Management



The Pannonian basin in Central Europe surrounded by the Alps and Carpathians is located on a characteristic positive geothermal anomaly with a geothermal gradient of about 45 °C/km.

TRANSENERGY addresses the key problem of using geothermal energy resources shared by different countries in a sustainable way. The main carrying medium of geothermal energy is thermal groundwater. Regional flow paths are strongly linked to geological structures that do not stop at state borders. Therefore only a transboundary approach and the establishment of a joint, multi-national management system may handle the assessment of geothermal potentials and give guidelines for a balanced fluid/heat production to avoid possible negative impacts (depletion, or overexploitation) in the neighboring countries.

Main Outputs

- multilingual interactive geothermal web-portal containing a database linked to thematic maps, cross sections and models
- geological, hydrogeological and geothermal models for the supra-regional and pilot areas
- scenario models showing estimates on the potential and vulnerability of the cross-border geothermal systems for different extractions of thermal water/heat
- database of current geothermal energy users and production parameters, visualized on transboundary utilization maps
- database of authorities dealing with management and licensing of transboundary geothermal aquifers
- summary of actual legal and funding framework at the participating countries with emphasis on cross-border geothermal facilities
- strategy paper evaluating existing exploitation, future possibilities and recommendations for a sustainable and efficient geothermal energy production at the project area