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The challenges for geothermal energy development in the Balkan countries: examples from Romania and Serbia

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In the 1960s the Balkan countries have been extensively explored for possible petroleum resources. However, testing boreholes revealed also potential for geothermal energy while exploration for petroleum was not as successful and therefore, slowly abandoned. In total, about 250 wells have been drilled in Romania with estimated total capacity of 480 MWt. Nevertheless, only 30 % of the resources are currently in use (Colesca and Ciocoiu, 2013) due to technical, political and financial issues. To investigate the reasons for the low rate of geothermal energy utilization, we conducted a stakeholder analysis in representative case studies in Western Romania and Southwestern Serbia. For this purpose, we visited selected sites, conducted interviews and collected relevant data on the potential of geothermal resources. Preliminary results from the stakeholder analysis reveal the major obstacles for a better use of geothermal resources in the area: i) conflicting energy policies between local and national government, ii) legislative requirements hampering further development geothermal exploitation and iii) lack of cooperation between linguistic groups in southwestern Serbia. Based on these results we conclude that the potential for renewable and low-carbon geothermal energy production presents a possible alternative to coal and wood heating for the local population in the investigated case studies.