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## Using the Icelandic experience on renewable energy production to identify the potential of geothermal and small scale hydropower production in Serbia

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The electricity production in Serbia is dominated by fossil fuels, namely lignite coal, petrol and natural gas. Domestic household heating is primary based on firewood burning. The combination of fossil fuel energy production and firewood heating leads to health threatening air pollution during the winter months in many urban areas of Serbia. In Iceland, on the contrary, electricity and household heating is almost entirely based on renewable energy sources, namely hydropower and geothermal energy. Iceland has shifted away from fossil fuel energy production some 40 years ago, improving air quality in residential areas and reducing the energy price significantly. In this presentation we will outline how we intend to establish a research and teaching collaboration between Belgrade University and Reykjavik University with the objective to promote renewable energy sources in the Balkan states. We have identified demonstration sites in Iceland (e.g. the geothermal spring Reykjadalur in south eastern Iceland) and in Serbia (e.g. the geothermal reservoirs near Niska Banja, Vranjska Banja and Sijarinska Banja) to use as case studies for this collaboration. We will outline similarities between the study sites and identify the potential for renewable energy production in the Serbian sites. Based on the comparison of the Icelandic and Serbian study sites we will suggest a multi-disciplinary research approach, ranging from technical engineering aspects, to earth sciences investigation and social-ecological system analysis, for further research collaboration.

## Side note:

A Serbian TV documentary of this collaboration can be seen here: http://www.rts.rs/page/stories/ci/story/124/drustvo/2980878/gejzer-kao-sansa-za-razvoj-male-opstine-.html