

# Review of: "The Geobattery Concept: A Geothermal Circular Heat Network for the Sustainable Development of Near Surface Low Enthalpy Geothermal Energy to Decarbonise Heating"

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The geobattery concept presents some interesting ideas on how existing anthropogenic subsurface structures, in this case mines, can be used for geothermal enhancement of BHE, including the lifetime of such systems.

Based on process modeling, the geobattery model is demonstrated using a generic model with subsurface settings and material properties near Edinburgh.

Although the results of the process models somehow were to be expected, the concept presented allows initial conclusions to be drawn about feasibility of the concept in general.

As currently the rule "first come, first served" often limits further geothermal exploitation, the geobattery concept represents a solution for thermal regeneration of the subsurface. In a next step, a "real world" pilot study could substantiate the findings of the concept.