

A computational investigation on the heat transfer loss for the Geothermal district heating in the Baltic region

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Abstract

Geothermal energy District Heating (DH) is mainly available in the northern EU, exhibiting the advantage of lower carbon emissions and cost. However, DH does require a larger area (plant area) and an insulated pipe network with a large diameter. This network is subject to heat losses to the ground. This study aims to investigate computationally the effect of this heat transfer loss from the piping network in the Baltic region with parametric analysis and the effect of different depths.