GeoWell - Innovative materials and designs for long-life hightemperature geothermal wells

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Keywords: high-temperature geothermal, well design, cementing, casings, monitoring, well integrity, risk assessment

The GeoWell research project is funded through the EC-Horizon 2020 programme addressing various aspects of new and enhanced technology for the design and operation of high-temperature geothermal wells. These include cement slurry design, casing material selection, coupling of casings, downhole temperature and strain measurements in real time using fibre optic technologies, as well as novel methods for risk assessment with respect to well planning, design and operation of geothermal wells. The research is focused on both conventional geothermal production wells and deeper wells, where the pressure is as high as 150 bar and temperatures can exceed 400 °C. The technologies under development and material candidates are tested under simulated conditions in laboratories and partly in-situ in existing geothermal environment. The poster gives an overview of the main research topics and results achieved so far in the GeoWell project.