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DEEPEGS and the IDDP, Focus on Reykjanes Demonstration

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The DEEPEGS project is a demonstration project, supported by the European Commission, Horizon 2020. The goal is to demonstrate the feasibility of enhanced geothermal systems (EGS) for delivering energy from renewable resources in Europe. It is a four years project coordinated by HS Orka, Iceland, in cooperation with partners from Iceland, France, Germany, Italy, and Norway.
The project will be testing stimulation technologies for EGS in deep wells in different geological settings, and intends to deliver new innovative solutions and models for wider deployments of EGS reservoirs with sufficient permeability to delivering significant amounts of geothermal power across Europe. The project will demonstrate advanced technologies in three types of geothermal reservoirs, (i) in high enthalpy resource beneath existing hydrothermal field at Reykjanes (volcanic environment with a saline fluid) with temperature up to 550°C and (ii) two very deep hydrothermal reservoirs in southern France with temperatures up to 220°C.
The focus of the talk at EGU 2016 will be on the Icelandic part of the DEEPEGS project and its connection to the IDDP project in Iceland, and to the ICDP. The deep well at Reykjanes, identified as well IDDP-2, is expected to be completed in 2016. A 2.5 km deep production well will be refurbished and deepened to 5 km by HS Orka, Statoil and IDDP. After drilling the well it will be extensively tested for injectivity, and connection to the overlying conventional hydrothermal field, and subsequently flow tested for fluid chemistry and production properties.
The DEEPEGS consortium is industry driven with five energy companies that will implement the project's goal through cross-fertilisation and sharing of knowledge. The companies are all highly experienced in energy production, and three of them are already delivering power to national grids from geothermal resources.