

Environmental aspects:

What society knows today, what CHPM2030 will revolutionise tomorrow



CHPM2030

CHPM2030

What is CHPM2030?

CHPM2030 (Combined Heat, Power and Metal extraction from ultra-deep ore bodies with an aim of implementation by 2030) is a H2020 project funded by the European Union and working on a unique disruptive technology that will combine geothermal energy development and minerals extraction.

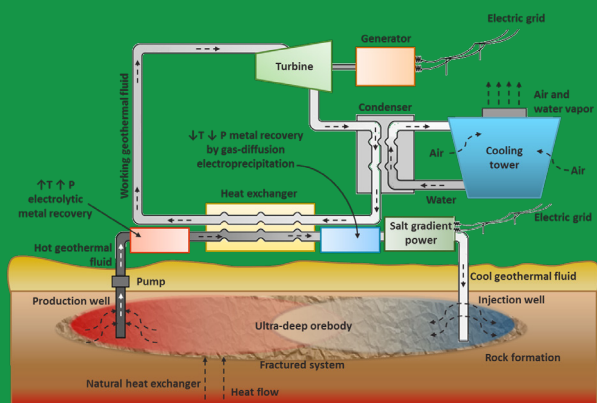
It will respond to two challenges:

The European energy market makes efforts to become less dependent on imported fossil fuels and to reduce the environmental impact of its energy supply. A major option, geothermal energy is already being used worldwide, including in many parts of Europe, because it is clean, renewable and constant.

Europe has another major challenge: securing the supply of critical raw materials, in particular metals, for industry and society. The dependency on metals is growing every year, despite significant efforts in the development of recycling and substitution.

What is the goal of CHPM2030 and how will it be achieved?

CHPM2030 develops an “orebody-EGS (Enhanced Geothermal System)” that will serve as a basis for the development of a new type of facility used for the co-production of energy and metals, in order to improve the economics of geothermal energy production.



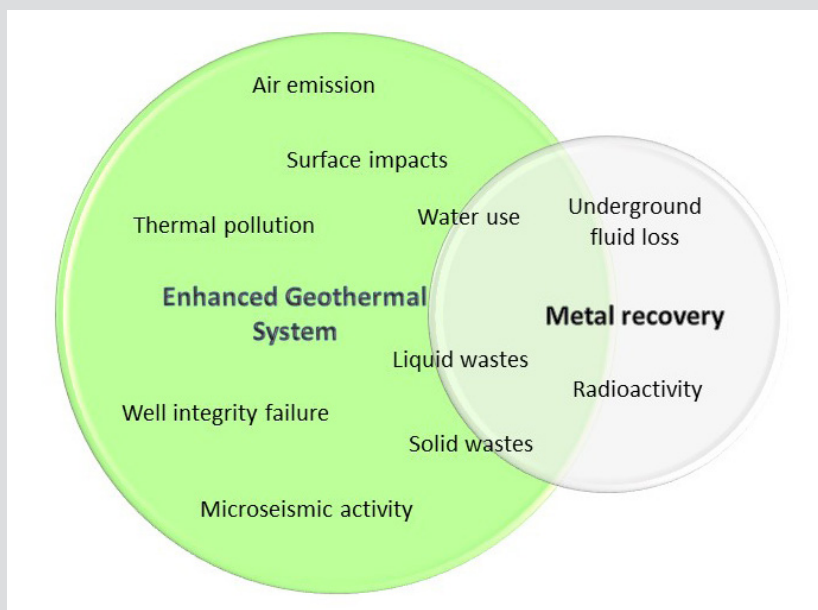
Environmental aspects

Why start there?

The expected scientific breakthroughs and the successful implementation of such an ambitious project can not be deployed without assessing its many impacts.

What are the possible impacts?

Environmental but also economic, social, policy and ethical aspects will be assessed.



Potential environmental impacts of a CHPM facility, based on the combination of EGS and metal recovery.

What society knows today, what CHPM will revolutionise tomorrow:

CHPM2030 will extract metals from great depths using solutions, and will therefore have less need for large opencast mining operations and their associated unwanted environmental impacts.

Moreover, the project will enhance overall geothermal uptake through better economics, trying to maximise the potential for renewable energy generation.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 654100.

Project duration: 1 January 2016–30 June 2019

Photo: Courtesy Vigdís Harðardóttir, Iceland Geological Survey

