

TOWARDS CLEAN MINING AND ENERGY: THE CHPM CONCEPT

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The European economy is heavily dependent upon energy and mineral supply for industry and society. Therefore, key challenges are to lower the costs and the environmental impact of energy production, and to decrease the dependence on imported strategic raw materials. The H2020 project "CHPM2030-Combined Heat, Power and Metal extraction from ultra-deep ore bodies" aims to develop a novel technology which combines geothermal resource development and metals extraction in a single interlinked process. In order to improve the economics of geothermal energy production, the project investigates possible technologies of manipulating metal-bearing geological formations with geothermal potential at a depth of 3-4 km and even deeper. In this way, the co-production of energy and metals will be possible and may be optimised according to market demands in the future. Environmental aspects of the technology are in focus during the research. The project will provide a proof of the technological concept on a laboratory scale through the cooperation of 12 partners from 10 European countries.

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