

## PROJECT COORDINATOR

UNIVERSITY OF MISKOLC / UNIM, FACULTY OF EARTH SCIENCE & ENGINEERING / HUNGARY  
[WWW.UNI-MISKOLC.HU](http://WWW.UNI-MISKOLC.HU)

COORDINATING TEAM: ÉVA HARTAI: [FOLDSHE@UNI-MISKOLC.HU](mailto:FOLDSHE@UNI-MISKOLC.HU) - TAMÁS MADARÁSZ: [HGMT@UNI-MISKOLC.HU](mailto:HGMT@UNI-MISKOLC.HU)  
AND ARANKA FÖLDESSY: [TTKFA@UNI-MISKOLC.HU](mailto:TTKFA@UNI-MISKOLC.HU)

## CONSORTIUM

UNIVERSITY OF SZEGED / HUNGARY ([WWW.U-SZEGED.HU](http://WWW.U-SZEGED.HU)) - EUROPEAN FEDERATION OF GEOLOGISTS / EFG / BELGIUM  
([WWW.EUROGEOLOGISTS.EU](http://WWW.EUROGEOLOGISTS.EU)) - ICELAND GEOSURVEY / ISOR / ICELAND ([WWW.GEOTHERMAL.IS](http://WWW.GEOTHERMAL.IS)) - NATURAL ENVIRONMENT  
RESEARCH COUNCIL / NERC / BRITISH GEOLOGICAL SURVEY / UK ([WWW.BGS.AC.UK](http://WWW.BGS.AC.UK)) - NATIONAL LABORATORY OF ENERGY AND  
GEOLOGY / LNEG / PORTUGAL ([WWW.LNEG.PT](http://WWW.LNEG.PT)) - FLEMISH INSTITUTE FOR TECHNOLOGICAL RESEARCH / VITO / BELGIUM -  
([WWW.VITO.BE](http://WWW.VITO.BE)) - LA PALMA RESEARCH CENTRE / LPRC / SPAIN ([WWW.LAPALMACENTRE.EU](http://WWW.LAPALMACENTRE.EU)) - AGENCY FOR INTERNATIONAL MINERAL  
POLICY / MINPOL / AUSTRIA ([WWW.MINPOL.COM](http://WWW.MINPOL.COM)) - GEOLOGICAL INSTITUTE OF ROMANIA / IGR / ROMANIA  
([WWW.IGR.RO](http://WWW.IGR.RO)) - KU LEUVEN, DEPT. MATERIALS ENGINEERING / BELGIUM ([WWW.KULEUVEN.BE](http://WWW.KULEUVEN.BE)) - GEOLOGICAL SURVEY OF SWEDEN /  
SGU / SWEDEN ([WWW.SGU.SE](http://WWW.SGU.SE))

## LINKED THIRD PARTIES

CZECH UNION OF GEOLOGICAL ASSOCIATIONS / CZECH REPUBLIC ([WWW.CALG.CZ](http://WWW.CALG.CZ)) - FINNISH UNION OF ENVIRONMENTAL  
PROFESSIONALS / FINLAND ([WWW.YKL.FI](http://WWW.YKL.FI)) - FRENCH GEOLOGICAL SOCIETY / FRANCE ([WWW.GEOSOC.FR](http://WWW.GEOSOC.FR)) - PROFESSIONAL  
ASSOCIATION OF GERMAN GEOSCIENTISTS / GERMANY ([WWW.GEOBERUF.DE](http://WWW.GEOBERUF.DE)) - ASSOCIATION OF GREEK GEOLOGISTS / GREECE  
([WWW.GEOLOGIST.GR](http://WWW.GEOLOGIST.GR)) - HUNGARIAN GEOLOGICAL SOCIETY / HUNGARY ([WWW.FOLDTAN.HU](http://WWW.FOLDTAN.HU)) - INSTITUTE OF GEOLOGISTS OF  
IRELAND / IRELAND ([WWW.IGI.IE](http://WWW.IGI.IE)) - ITALIAN NATIONAL COUNCIL OF GEOLOGISTS / ITALY ([WWW.CNGEOLOGI.IT](http://WWW.CNGEOLOGI.IT)) - ROYAL GEOLOGICAL  
AND MINING SOCIETY OF THE NETHERLANDS / THE NETHERLANDS ([WWW.KNGMG.NL](http://WWW.KNGMG.NL)) - POLISH ASSOCIATION OF MINERALS ASSET  
VALUATORS / POLAND ([WWW.POLVAL.PL](http://WWW.POLVAL.PL)) - ASSOCIATION OF PORTUGUESE GEOLOGISTS / PORTUGAL ([WWW.APGEOLOGOS.PT](http://WWW.APGEOLOGOS.PT)) -  
SERBIAN GEOLOGICAL SOCIETY / SERBIA ([WWW.SGD.RS](http://WWW.SGD.RS)) - SLOVENIAN GEOLOGICAL SOCIETY / SLOVENIA  
([WWW.GEOLSKODRUSTVO.SI](http://WWW.GEOLSKODRUSTVO.SI)) - OFFICIAL SPANISH ASSOCIATION OF PROFESSIONAL GEOLOGISTS / SPAIN ([WWW.ICOG.ES](http://WWW.ICOG.ES)) - SWISS  
ASSOCIATION OF GEOLOGISTS / SWITZERLAND ([WWW.CHGEOL.CH](http://WWW.CHGEOL.CH)) - UKRAINIAN ASSOCIATION OF GEOLOGISTS / UKRAINE -  
([WWW.GEOLOG.ORG.UA/EN](http://WWW.GEOLOG.ORG.UA/EN)) - ROYAL BELGIAN INSTITUTE OF NATURAL SCIENCES / BELGIUM ([WWW.NATURALSCIENCES.BE](http://WWW.NATURALSCIENCES.BE))

## MORE INFORMATION

[CHPM2030.EU](http://CHPM2030.EU)



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

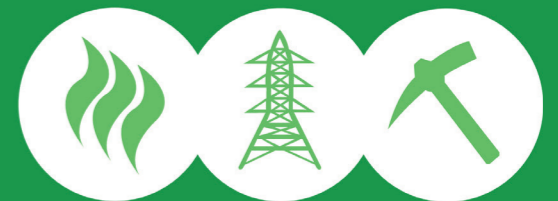
Project duration: 1 January 2016 – 30 June 2019

Cover photo: Courtesy Vigdís Harðardóttir, Iceland Geological Survey



CHPM2030

# CHPM2030



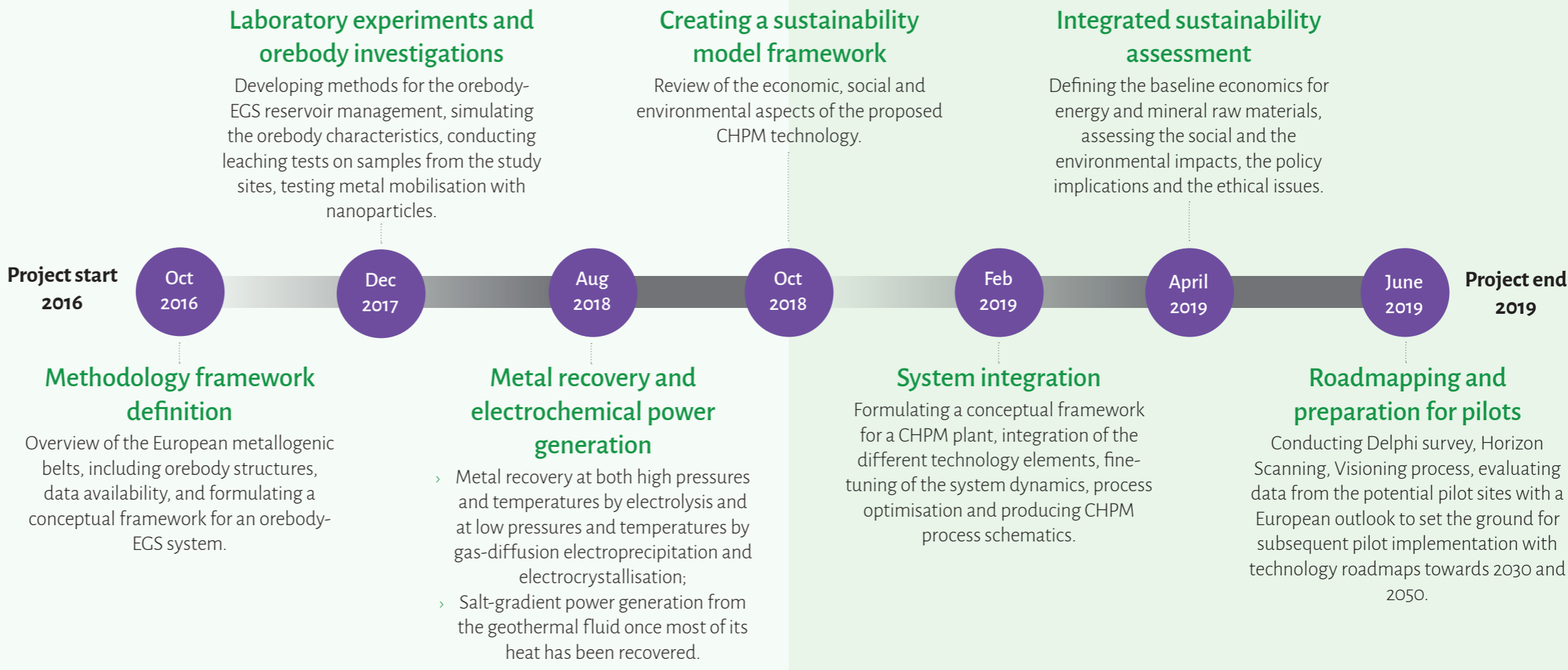
## Combined Heat, Power and Metal Extraction

PROJECT CONCEPT  
AND APPROACH

The European economy is heavily dependent upon energy and mineral supply for industry and society. Therefore, key challenges are: lowering the costs and the environmental impact of energy production, and decreasing the dependence on imported strategic raw materials. Responding to these challenges, the CHPM2030 project aims to develop a novel technology, which combines deep geothermal energy production with metals extraction from the geothermal fluid in a single interlinked process (Combined Heat Power and Metals – CHPM). In order to improve the economics of deep geothermal energy development, the project investigates possible technologies for manipulating metal-bearing geological formations with geothermal potential at a depth of 3 to 4 km, and potentially even deeper. Our aim is that the co-production of energy and metals will become possible and may be optimised according to market demands in the future. The project will provide a proof of the technological concept on a laboratory scale.

COMPLETED AND ONGOING ACTIVITIES

UPCOMING ACTIVITIES



Outcomes from these activities are available for download at <http://www.chpm2030.eu/outreach>.

For all updates, follow the project via the social media @CHPM2030 and [chpm2030.eu/news](http://chpm2030.eu/news).

