



Piloting Underground Storage of Heat In geoThermal reservoirs

Fact Sheet

Project Information

PUSH-IT

Grant agreement ID: 101096566

DOI

[10.3030/101096566](https://doi.org/10.3030/101096566)

EC signature date

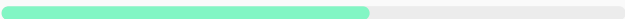
14 December 2022

Start date

1 January 2023

End date

31 December 2026



Funded under

Climate, Energy and Mobility

Total cost

€ 19 763 179,99

EU contribution

€ 17 903 348,29

Investment in EU policy priorities

Digital agenda	☐	Clean air	☐
Artificial Intelligence	☐	Climate action	☒
Biodiversity	☐		

Coordinated by

TECHNISCHE UNIVERSITEIT
DELFT

 Netherlands

Project description

Demonstrating improved efficiency and integration of underground heat storage systems

Geothermal energy is a highly efficient and widely utilised sustainable energy source across Europe. Further innovation on heat storage in geothermal reservoirs helps to improve its output and decrease emissions. In this context, the EU-funded PUSH-IT project aims to enhance geothermal energy's potential by introducing and demonstrating innovative high-temperature heat storage solutions that can be customised to different types of supply-demand and geological conditions. These solutions are expected to significantly impact renewable energy systems, improving societal and technical integration and efficiency and lowering emissions. The innovative testing approach of the project will pave the way for the development of critical enabling technologies that can reduce environmental impact, lower energy costs and increase sustainability.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [electrical engineering](#), [electronic engineering](#), [information engineering](#) > [electronic engineering](#) > **[control systems](#)**

[engineering and technology](#) > [mechanical engineering](#) > [thermodynamic engineering](#) > **[heat engineering](#)**

[natural sciences](#) > [earth and related environmental sciences](#) > **[hydrology](#)**

[social sciences](#) > [economics and business](#) > [business and management](#) > **[business models](#)**

[engineering and technology](#) > [environmental engineering](#) > [energy and fuels](#) > [renewable energy](#) > **[geothermal energy](#)**

Keywords

[Geothermal heat](#)

[storage](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.2 - Energy Supply](#)

Topic(s)

[HORIZON-CL5-2022-D3-01-04 - Demonstrate the use of high temperature geothermal reservoirs to provide energy storage for the energy system](#)

Call for proposal

[See other projects for this call](#)

Funding Scheme

[HORIZON-IA - HORIZON Innovation Actions](#)

Coordinator



TECHNISCHE UNIVERSITEIT DELFT

Net EU contribution

€ 2 373 212,50

Total cost

€ 2 373 212,50

Address

STEVINWEG 1

2628 CN Delft

 **Netherlands** 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Participants (16)



EQUANS NEDERLAND NV

 **Netherlands**

Net EU contribution

€ 21 144,99

Address

KOSTERIJLAND 20

3981 AJ Bunnik 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 2 983 851,52

 **THIRD-PARTY** 

EQUANS ENERGY SOLUTIONS BV

 Netherlands

Net EU contribution

€ 1 631 647,07

Address

KOSTERIJLAND 20

3981 AJ Bunnik 

SME 

Yes

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data

 **THIRD-PARTY** 

AARDYN BV

 Netherlands

Net EU contribution

€ 77 959,44

Address

LAAN VAN BARCELONA 800

3317 DD Dordrecht 

SME 

Yes

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data

 THIRD-PARTY 

EQUANS VENTURES & INTEGRATED SOLUTIONS B.V.

 Netherlands

Net EU contribution

€ 357 944,57

Address

KOSTERIJLAND 20
3981AJ Bunnik 

SME 

Yes

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



KWR WATER BV

 Netherlands

Net EU contribution

€ 318 750,00

Address

GRONINGENHAVEN 7
3433 PE NIEUWEGEIN 

Activity type
Research Organisations

Links
[Contact the organisation](#)  [Website](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost
€ 318 750,00



TECHNISCHE UNIVERSITAT DARMSTADT

 Germany
Net EU contribution
€ 1 577 251,70

Address
KAROLINENPLATZ 5
64289 Darmstadt 

Region
Hessen > Darmstadt > Darmstadt, Kreisfreie Stadt

Activity type
Higher or Secondary Education Establishments

Links
[Contact the organisation](#)  [Website](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost
€ 1 577 251,70



**FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN
FORSCHUNG EV**

 Germany
Net EU contribution
€ 3 810 000,00

Address

HANSASTRASSE 27C

80686 Munchen 

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 3 924 250,00

 **THIRD-PARTY** 

RUHR-UNIVERSITAET BOCHUM

 Germany

Net EU contribution

€ 114 250,00

Address

UNIVERSITAETSSTRASSE 150

44801 Bochum 

Region

Nordrhein-Westfalen > Arnsberg > Bochum, Kreisfreie Stadt

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



GFZ HELMHOLTZ-ZENTRUM FUR GEOFORSCHUNG

 Germany

Net EU contribution

€ 1 756 251,43

Address

TELEGRAFENBERG
14473 POTSDAM 

Region

Brandenburg > Brandenburg > Potsdam

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 1 756 251,43



VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.

 Belgium

Net EU contribution

€ 1 171 000,00

Address

BOERETANG 200
2400 Mol 

Region

Vlaams Gewest > Prov. Antwerpen > Arr. Turnhout

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 1 171 000,00



CESKA GEOLOGICKA SLUZBA

 Czechia

Net EU contribution

€ 984 743,75

Address

Klarov 3/131

11821 Prague 1 

Activity type

Research Organisations

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 984 743,75



HUISMAN GEO B.V.

 Netherlands

Net EU contribution

€ 854 945,00

Address

ADMIRAAL TROMPSTRAAT 2

3115 HH Schiedam 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 1 221 350,00



BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES

 France

Net EU contribution

€ 731 953,00

Address

3 AV CLAUDE GUILLEMIN
45060 Orleans 

Region

Centre — Val de Loire > Centre — Val de Loire > Loiret

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost

€ 731 953,00



UNIVERSITEIT UTRECHT

 Netherlands

Net EU contribution

€ 521 577,34

Address

HEIDELBERGLAAN 8
3584 CS Utrecht 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost

€ 521 577,34



GRONDBOORBEDRIJF HAITJEMA B.V.

 Netherlands

Net EU contribution

€ 1 395 966,25

Address

WISSELING 10

7701GS Dedemsvaart 

Region

Oost-Nederland > Overijssel > Noord-Overijssel

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 1 994 237,50



UNIVERZITA KARLOVA

 Czechia

Net EU contribution

€ 204 751,25

Address

OVOČNY TRH 560/5

116 36 Praha 1 

Region

Česko > Praha > Hlavní město Praha

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 204 751,25

Partners (5)



PARTNER

UNIVERSITE DE GENEVE

Switzerland

Net EU contribution

€ 0,00

Address

RUE DU GENERAL DUFOUR 24

1211 Geneve

Region

Schweiz/Suisse/Svizzera > Région lémanique > Genève

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



PARTNER

ANGLIA RUSKIN UNIVERSITY HIGHER EDUCATION CORPORATION

United Kingdom

Net EU contribution

€ 0,00

Address

BISHOP HALL LANE

CM1 1SQ Chelmsford

Region

East of England > Essex > Heart of Essex

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

Total cost

No data



PARTNER 

UNITED KINGDOM RESEARCH AND INNOVATION

 United Kingdom

Net EU contribution

€ 0,00

Address

POLARIS HOUSE NORTH STAR AVENUE
SN2 1FL Swindon 

Region

South West (England) > Gloucestershire, Wiltshire and Bristol/Bath area > Swindon

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



PARTNER 

GEOTHERMAL ENGINEERING LTD

 United Kingdom

Net EU contribution

€ 0,00

Address

BICKLAND WATER ROAD
SW1V 3EL Falmouth Cornwall 

SME 

Yes

Region

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

- [Contact the organisation](#)
- [Participation in EU R&I programmes](#)
- [HORIZON collaboration network](#)

Total cost

No data



PARTNER

THE UNIVERSITY OF EXETER

 United Kingdom

Net EU contribution

€ 0,00

Address

THE QUEEN'S DRIVE NORTHCOTE HOUSE
EX4 4QJ Exeter

Region

South West (England) > Devon > Devon CC

Activity type

Higher or Secondary Education Establishments

Links

- [Contact the organisation](#)
- [Website](#)
- [Participation in EU R&I programmes](#)
- [HORIZON collaboration network](#)

Total cost

No data

Last update: 5 April 2023

Permalink: <https://cordis.europa.eu/project/id/101096566>

