**GEOforFOOD** webinar

29 June 2021 15:30 CEST









## GEOTHERMICA

GEOforFOOD webinar June 29<sup>th</sup>

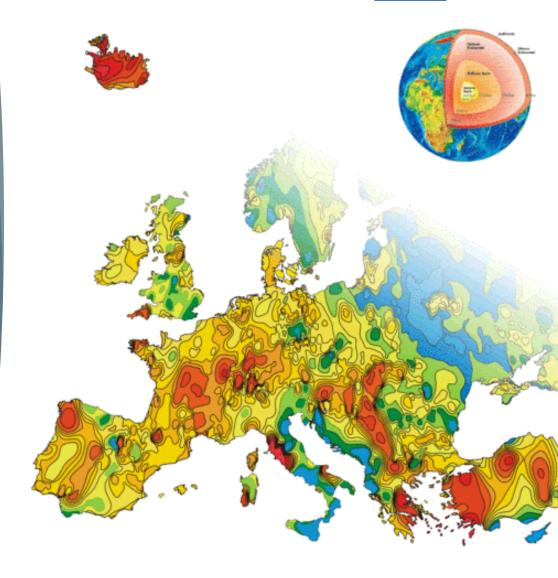


#### Geothermal energy can play a major role in the reduction of CO<sub>2</sub> emissions in Europe

It provides reliable baseload power and heatthermal networks and storage can balance intermittent supplies from other renewable energy sources

Geothermal energy is an indigenous source of energy and contributes to Europe's security of supply.





#### OS and RANNIS (IS) . RCN (NO) o. EUDP (DK) a. FZJ-PtJ (DE) o. RVO (NL) o. GSI (IE) a. VEA (BE) o ADEME and MEDDE (FR) . DETEC (CH) . MzI-DE (SI) o MIUR (IT) o AEI and CDTI (ES) . FRCT-PT and DGEG (PT) UEFISCDI (RO) ° TÜBITAK (TR) Figure: GEOTHERMICA Consortium **GEOTHERM** DoE (USA) o-

#### **GEOTHERMICA**

Initiated as Geothermal ERA-NET 2012-2016 by Iceland, Netherlands, Germany, Italy & Switzerland

Emphasis on minimizing the fragmentation of the sector, building European know how & contributing to framework and policy

Currently <u>20 geothermal</u> energy research and innovation programme owners and managers from <u>16 countries</u>

European Commission (EC) co-funds the 1st Call

2<sup>nd</sup> Call in progress with new partners- Norway and USA, but no funding from EC

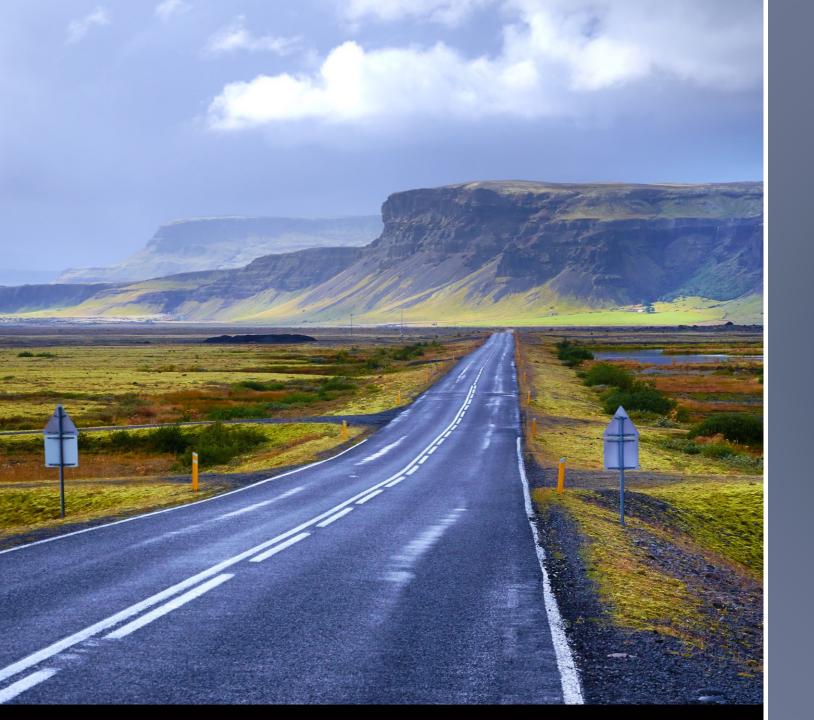
Influence on a worldwide scale the development of geothermal energy



# What is GEOTHERMICA?

GEOTHERMICA's objective is to combine the financial resources and know-how of 20 geothermal energy research and innovation programme owners and managers from 16 countries and their regions.

GEOTHERMICA has launched joint projects that demonstrate and validate novel concepts of geothermal energy deployment within the energy system, and that identify paths to commercial large-scale implementation.



# What will GEOTHERMICA do?

- 1) GEOTHERMICA has launched joint projects that demonstrate and validate novel concepts of geothermal energy deployment within the energy system, and that identify paths to commercial largescale implementation.
- **2)** Continue the joint collaboration work from previous Geothermal ERA NET project and other additional activities

Joint Actions (GEOforFOOD, OpERA, JoProShow etc...)
Information exchange
Work workshops
Policy work...

#### GEOTHERMICA Joint Calls for innovative projects GEOTHERM



Accelerating the development of geothermal energy globally

#### Call 1 – co-funded call with EC top-up

- 8 projects funded
- Total project cost: 44M€
- GEOTHERMICA funding: 23M€ (55%)



#### Call 2 – co-funding call without EC top-up

- 7 projects funded
- Total project cost: 39M€
- GEOTHERMICA funding: 24M€ (61%)



# Call for proposals 2021

Accelerating the Heating and Cooling Transition



#### Focus area

Projects should develop **innovative solutions** or **new concepts** for <u>one or more</u> of the following challenges

- Climate-neutral resources for heating <u>and/or</u> cooling, including subsurface (shallow and deep geothermal, solar thermal, and other sources of renewable heating and cooling) and utilisation of local and regional excess resources.
- A resource-efficient and sustainable distribution, storage and utilisation of heating and/or cooling. This includes short time and seasonal thermal storage options, and innovations for heating and cooling networks, and conversion technologies such as heat pumps to distribute the heating and cooling and adjust the temperature level where needed.
- Integration of heating and/or cooling in the local and regional energy systems, including aspects of sector coupling, smart integration and control tools which shall leverage synergies and utilise flexibilities in locally and regionally available energy sources, urban planning on the local and regional infrastructures as well as the user and consumer structures from different sectors (including, e.g. communities, industrial facilities, or the transportation system) and related consumption patterns.

#### Timing of deadlines – Two stage call

ESS OPENS FOR PRE-PROPOSALS, 15 JUNE 2021

Application portal opens

PRE-PROPOSAL SUBMISSIONS DEADLINE, 4 OCTOBER 2021

ESS Application portal closes

ESS OPENS FOR FULL- PROPOSALS, 30 NOVEMBER 2021

Application portal opens

FULL-PROPOSAL SUBMISSIONS DEADLINE, 31 JANUARY 2022

ESS Application portal closes

FUNDING DECISION FEEDBACK, JUNE 2022

Tentative date

FUNDED PROJECTS START, SEPTEMBER 2022

*Tentative date for the project start* 





#### Additional Activities



### Part I: Activities focused on the GEOTHERMICA Member States & Regions

- Working groups on specific topics
  - Geothermal Guarantee Fund
  - GeoCities
  - GeoFood
- Analysis of the national barriers, opportunities and RD&D needs for geothermal energy

#### Part II: Activities for the community

- Dedicated Knowledge & Strategy Workshops:
  - New Concepts
  - Opera & Opera II
  - New ways of working finances
  - GEOTHERMICA Strategic Round Table



New Concepts (Innovations in geothermal) 2015

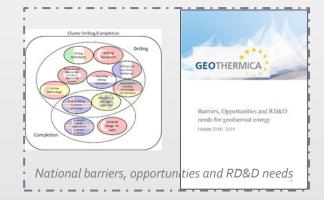








GeoCities, GeoFood concepts







OpERA (Operational issues 2015 Round Table (St

