



GreetGeo

GREET GEO

Green transition with geothermal energy



Funded by
the European Union

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PROJECT OBJECTIVES



ENCOURAGE INVESTMENT IN
GEOTHERMAL PROJECTS



DEVELOP INNOVATION-
BASED VALUE CHAINS



SUPPORT THE DEVELOPMENT OF
SMART SPECIALISATION STRATEGIES
(S3) AND EU FUNDING APPLICATIONS



REDUCE INVESTMENT
RISK

What does the project aim to achieve?

1. Increase investment in geothermal energy

➤ Especially in less developed regions of the Pannonian Basin and other EU areas (e.g. volcanic islands)

2. Develop innovation-based value chains for geothermal projects

➤ Connect research, industry and local communities

3. Support the development of regional S3 strategies

➤ Focus on geothermal niches and concrete implementation measures

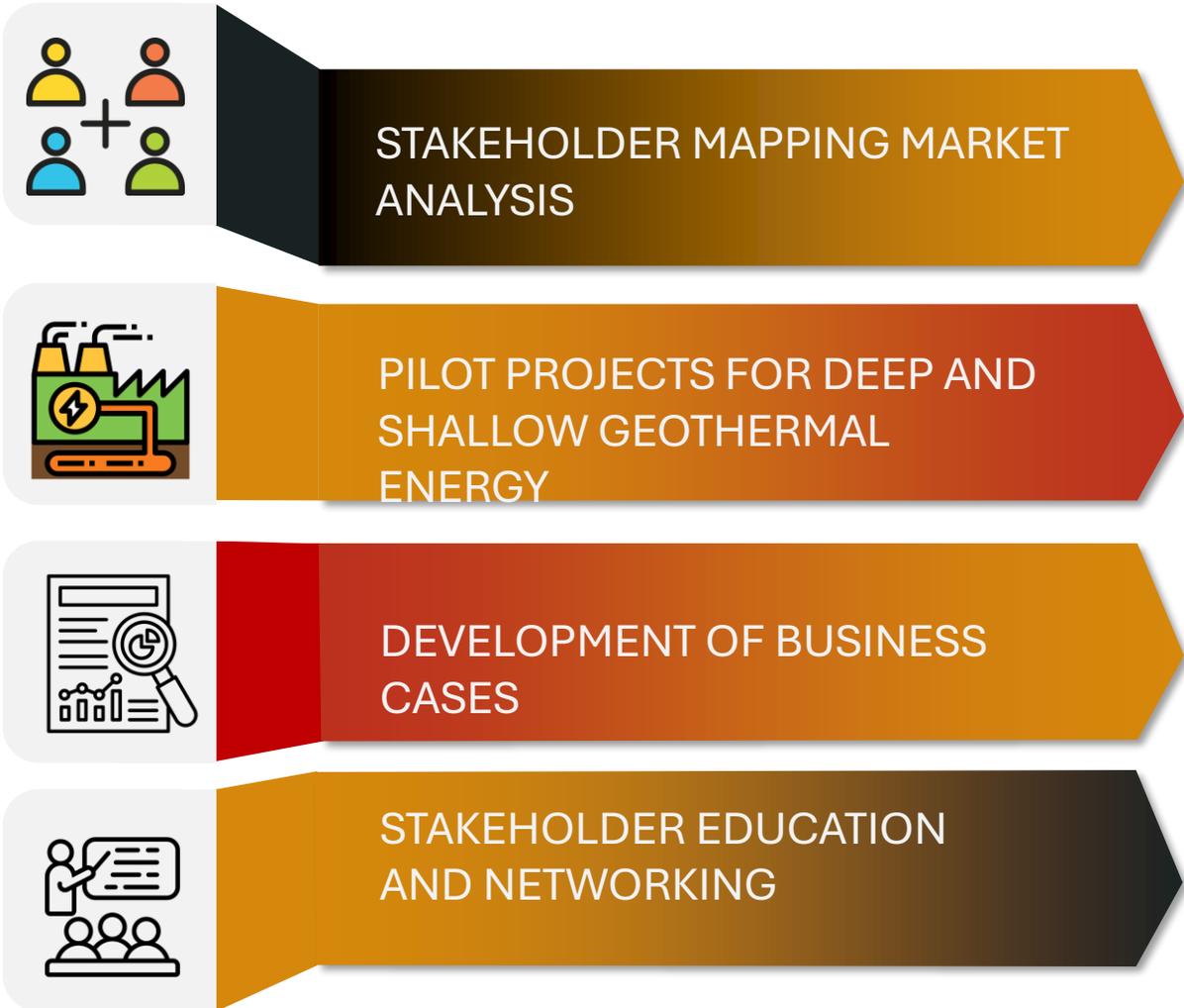
4. Prepare concrete projects for fundings

➤ Business cases and support for applications to I3, Interreg and other EU funds

5. Reduce investment risk

➤ Stakeholder education, financing models (ESCO, crowdfunding), and regulatory support

PROJECTS ACTIVITIES



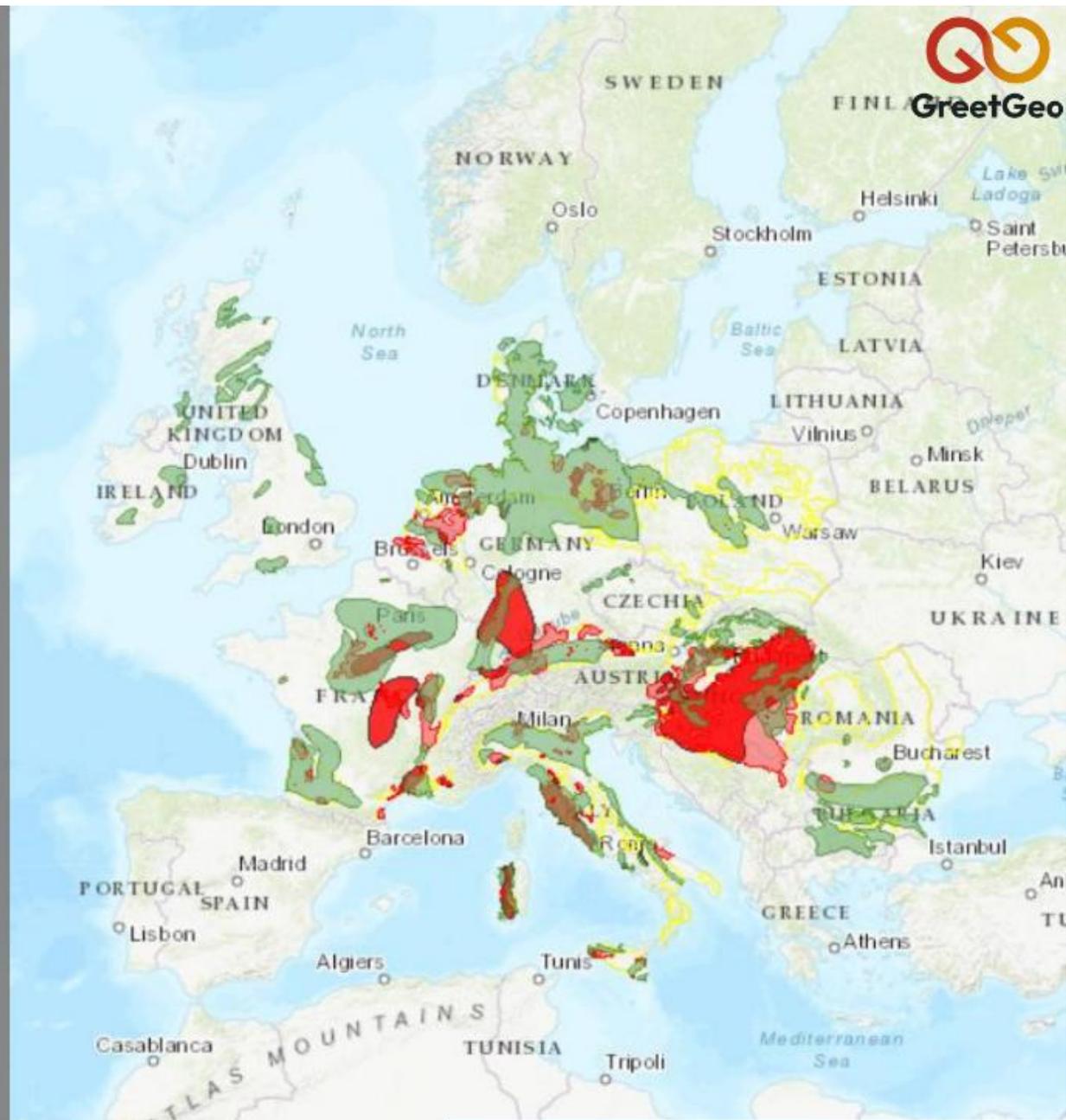
- 1. Stakeholder mapping and market analysis (WP2)**
 - Identifying potential partners for pilot projects, investments, and knowledge transfer – creation of an international stakeholder database
- 2. Development of regional S3 roadmaps (WP3)**
 - Creating geothermal energy strategies aligned with local potential, identifying weaknesses
- 3. Pilot projects for shallow and deep geothermal (WP3)**
 - Testing practical solutions and gathering feedback
- 4. Development of business cases and financing models (WP4)**
 - Preparing for investment and EU funding applications
- 5. Stakeholder education and networking**
 - Workshops, trainings, international collaboration, on-site visits

Why Geothermal?

- Large untapped potential in **Pannonian Basin**, Azores, Canaries
- **Baseload renewable** energy with high efficiency
- Applicable to **electricity, heating, cooling, agriculture**
- **High capacity factor, less land use**

Key Barriers to Geothermal Scale-Up

- High CAPEX & exploration risk
- Complex, fragmented regulation & permitting
- Lack of qualified workforce
- Insufficient political support
- Low public acceptance, confusion around technology
- Missing geological data & market statistics
- No geothermal strategy in all EU countries
- Lack of cross-sector integration
- Failure to recognize cross-sectorial opportunities



WP2 ACTIVITY: GEOTHERMAL STAKEHOLDER DATABASE

GEOTHERMAL STAKEHOLDER DATABASE

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ValueChain, Stage, Role

- (Blank)
- Deep geothermal
- Cross cutting / Policy & Promo.
- Drilling & Construction
- Exploration & Resource Assess...
- Geoscience & Engineering ...
- National geological survey ...
- University / Research institu...
- Financing & Risk mitigation
- Heat/Power distribution & End...

Region, Country

- (Blank)
- Azores (PT)
- Brussels (BE)
- Canarias (ES)
- Eastern & Midland (IE)

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Regions
16

Deep GT Stakeholders
380

Shallow GT Stakeholders
191

Stakeholders
536

Stakeholders by Region and ValueChain

ValueChain ● (Blank) ● Deep geother... ● Shallow ge...

Latitude/Longitude and ValueChain

ValueChain ● (Blank) ● Deep geothermal ● Shallow geothermal

Name

Arctic Green Energy
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Contact - email address: info@geoenergy-celle.de

Arctic Green Engineering Services
Contact - web: <http://www.geolog.it/>
Contact - email address: geolog@geolog.it

Árpád Agrár Zrt

Notes

Academic department conducting research in geosciences, geothermal energy, and subsurface characterization.

Academic department conducting research on geology, geothermal systems, and subsurface



Strong interest in cooperation

SMEs, municipalities, clusters, and research institutions want more cross-regional collaboration and joint pilots.



Clear need for financial de-risking

Stakeholders ask for incentives, guarantees, risk-sharing schemes, and PPP models.



Regulatory simplification

Complex permitting, lack of standardised procedures, and unclear rules appear across several regions.



Different risk profiles: deep vs. shallow

Deep: high CAPEX + geological risk
Shallow: costs, awareness, workforce, regulation



Skills and capacity gaps

Shortages in installers, drilling expertise, and municipal technical capacity.

The following challenges hinder geothermal energy development in my region

● Strongly Agree ● Agree ● Neutral ● Disagree ● Strongly Disagree

Lack of financial support or investment

Regulatory barriers (e.g., permitting, legal frameworks)

Market demand for geothermal energy in my country/region

Competitiveness of geothermal energy compared to other energy sources (e.g., fossil fuels, solar, wind)



Deep geothermal energy investments will be most successful if the following types of support are provided:
(Please select your level of agreement for each statement.)

● Strongly Agree ● Agree ● Neutral ● Disagree ● Strongly Disagree

Financial incentives (e.g., subsidies, tax breaks, low-interest loans, or grants)

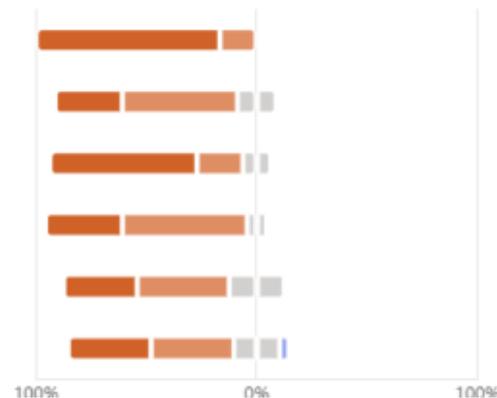
Technical support (e.g., access to expertise, technology development, or project management support)

Regulatory support (e.g., streamlined permitting processes, clear legal frameworks, or government-backed guarantees)

Market demand stimulation (e.g., policies that drive the demand for geothermal energy, such as public procurement or feed-in...)

Public-private partnerships (e.g., collaboration between government bodies and private sector firms to share risks and...)

Investment in R&D (e.g., funding for research and development of new technologies, demonstration projects, or pilot initiatives)





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Thank you!



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