LIFE programme opportunities for geothermal sector

16/09/2021
Streams

The environment area has two sub-programmes:

➢ Nature and biodiversity
➢ Circular economy and quality of life

The climate action area also has two sub-programmes:

➢ Climate change mitigation and adaptation
➢ Clean energy transition
In this sub-programme, several opportunities have been identified for geothermal projects in the areas covering cities, regions, buildings, and financial instruments (risk management, insurance, sustainable finance actions). The calls listed under this sub-programme target both - ETS and non-ETS sectors (i.e., projects that cover TRL starting with 4-5 up to 8-9). For example, actions to:

a) increase the generation and use of renewable energy and improvement of energy efficiency: opportunity for geothermal heat pumps, Organic Rankine Cycle, geothermal cooling in supermarkets etc.

b) zero emission mobility and electric recharging materials clearly indicates and opportunity for project proposals for geothermal lithium

Deadline to apply for calls under the Climate change mitigation and adaptation sub-programme is 30 November 2021 17:00 Brussels time
Clean Energy Transition sub-programme

The LIFE Clean Energy Transition sub-programme continues to support the delivery of EU policies in the field of sustainable energy, in particular, the European Green Deal, the Energy Union (2030 energy and climate targets) and the European Union’s 2050 long-term decarbonisation strategy.

The LIFE Call for Proposals 2021 was published in July 2021 and includes 18 topics under the Clean Energy Transition sub-programme.

A total budget of €95 million are available for funding projects under this Call. **Approximately 60-65 projects will be co-funded.**

The usual duration of a project is between 18 and 36 months with a typical budget of €1-2 million.

**Timetable and deadlines**

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<tr>
<th>Event</th>
<th>Date/Time</th>
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<tr>
<td>Call opening</td>
<td>13 July 2021</td>
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<tr>
<td>Deadline for submission</td>
<td>12 January 2022 at 17:00:00 CET</td>
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<tr>
<td>Communication of the evaluation results</td>
<td>May - June 2022</td>
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<td>Grant Agreement signature</td>
<td>September 2022</td>
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Towards an effective implementation of key legislation in the field of sustainable energy

Under the call 2021, proposals are invited for the Scopes A and B, i.e. proposals for actions to support the implementation of:

• the Energy Efficiency Directive (Scope A) and
• of the Renewable Energy Directive (Scope B)

Actions under Scope B are expected to address core provisions and aspects of the Renewable Energy Directive, such as: mainstreaming renewable energy in heating and cooling, including district energy networks, notably with regard to collecting data on energy consumption in the heating and cooling sector, assessing existing market barriers and simplifying existing authorisation, certification and licensing procedures.

> Both for deep and shallow geothermal projects
LIFE-2021-CET-BUILDRENO

• Large-scale rollout of industrialised deep renovation solutions

Expected Impact:

• Cost optimal renovations delivered with a performance guarantee for the end user
• Reduction of time for renovation works on the building site compared with standard practice
• Demonstration of the effectiveness and replicability of the proposed solutions to lead to an increased rate of renovation
• Primary energy savings/Renewable energy generation triggered by the project (in GWh/year)
• Investments in sustainable energy triggered by the project (cumulative, in million Euro)
• Reduction of the greenhouse gases emissions (in tCO2-eq/year) and/or air pollutants (in kg/year) triggered by the project

> For geothermal HP
Fostering sustainable energy uptake along the whole value chain in industry and services

The scope of this topic is to establish collaborations between SMEs and larger companies, operating in the same value chain, in order to ensure that energy efficiency measures and the use of renewable energy sources are maximised at each step of the process, in line with the EU strategy on energy system integration and more in general with the EU Green Deal and the EU industrial strategy.

Proposals are expected to develop, test and validate innovative business models and approaches fostering collaboration among companies within one or several specific value chains in the industry and service sectors.


Art 23:
- promotion of heat purchase agreements for corporate and collective small consumers
- installation of highly efficient renewable heating and cooling systems in buildings, or use of renewable energy or waste heat and cold in industrial heating and cooling processes
Facing the increase in cooling demand of buildings in the coming years

The proposed actions are expected to provide an improved and comprehensive understanding of the cooling demand in buildings and to develop appropriate strategies on how this demand could be most effectively managed and met in a sustainable way, i.e. by reducing demand, improving energy efficiency and increasing the share of renewable energy.

> Geothermal cooling
Innovative financing schemes for sustainable energy investments

The topic aims to set up innovative financing schemes for sustainable energy investments. Proposals should address the set-up of innovative financing schemes leveraging private finance for sustainable energy investments, with a dedicated focus on energy efficiency. The financial solution should be operational by the end of the action, whereas the related investments may be implemented after project completion. Therefore, proposals should foresee necessary testing and exploitation activities during the action.

> Financing geothermal projects
Mainstreaming sustainable energy finance and integrating energy performance in EU sustainable finance criteria and standards

Proposals should address at least one of the 2 scopes detailed below.

**Scope A:** Proposals should mainstream and de-risk sustainable energy investments with a particular focus on private finance stakeholders.

**Scope B:** The proposed actions should focus on alignment or overachievement of the EU sustainable finance requirements in the field of sustainable energy investment.

- See GEOENVI LCA tools
- Cf delegated acts on sustainable finance regulations
  - “having to justify life-cycle emission performance below 100 gCO2eq/kWh for all geothermal technologies (production of electricity, combined heat & power, h&c +DH, HP and thermal storage)
  - threshold for energy activities was maintained, because of lack evidence clearly shows relevant technologies to be well below this level
LIFE funding opportunities for the geothermal energy sector

September 2021