



# Call Text and Guideline for Applicants

## Accelerating the Heating and Cooling Transition

### **Joint Call 2021** GEOHERMICA & JPP Smart Energy Systems

#### **GEOHERMICA & JPP SES 2021**

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## Acronyms and Abbreviations

JPP SES- Joint Programming Platform - Smart Energy Systems

ESS- Electronic Submission Systems

## Acknowledgement

This is a collective work between the GEOTHERMICA ERA-Net and Joint Programming Platform - Smart Energy Systems Era- Net networks over the past year through networks and discussions extensively reviewed by commentators across both networks countries representatives.

Special thank you to the GEOTHERMICA network coordinator Mr Guðni A. Jóhannesson, and Co-Chair of JPP SES network Mr Fredrik Lundström for the insightful discussions on the joint work and engagement in continuous contributions to building and preparing the Joint Call.

# 1 Introduction

This document describes the objectives, scope, and topics of the ERA-NET GEO THERMICA and Joint Programming Smart Energy Systems (JPP SES) joint call on Accelerating the Heating and cooling transition. It describes the rules for participation and procedures from proposal to implementation of the projects. Further information on ERANET GEO THERMICA and JPP SES can be found on the websites [www.geothermica.eu](http://www.geothermica.eu) and [eranet-smartenergysystems.eu](http://eranet-smartenergysystems.eu).

GEO THERMICA is a transnational cooperation action to accelerate the deployment of geothermal energy in Europe by joint calls for collaborative innovation projects and other joint activities, which will enhance the coordination of public research and innovation programmes and improve the exploitation of results of the projects funded.

JPP SES is a transnational Joint Programming Platform to Initiate Co-Creation and Promote Energy System Innovation. It gathers a network of owners and managers of national and regional public funding programs in the field of research, technical development and demonstration. The objective is to provide a sustainable and service-oriented platform to finance transnational RDD projects, developing technologies and solutions in thematic areas like smart power grids, regional and local energy systems, heating and/or cooling networks, digital energy and smart services etc.

Both GEO THERMICA & JPP SES have been organising joint Calls in previous years. This joint Call, organised by both networks together, has a broader heating and/or cooling scope than the last Calls. This Call seeks to accelerate the heating and cooling transition by bringing together national programmes aimed at energy system integration and programmes aimed at technological progress in the various heating and/or cooling technologies, with a strong presence but not limited to geothermal energy technologies.

The GEO THERMICA & JPP SES Joint Call is a two-stage process. Stage 1 asks for pre-proposals, and Stage 2 asks for full project proposals. Below, please find the timeline for this Joint Call 2021:

<b>JOINT CALL OPENING</b> <i>Publishing Call Text information</i>	<b>31 MAY 2021</b>
<b>ESS OPENS FOR PRE-PROPOSALS SUBMISSIONS <sup>1</sup></b> <i>Application portal opens</i>	<b>15 JUNE 2021</b>
<b>PRE-PROPOSAL SUBMISSIONS DEADLINE</b> <i>ESS Application portal closes at 15:00 UTC, Reykjavik Iceland</i>	<b>4 OCTOBER 2021</b>
<b>ESS OPENS FOR FULL- PROPOSALS SUBMISSIONS</b> <i>Application portal opens</i>	<b>30 NOVEMBER 2021</b>
<b>FULL-PROPOSAL SUBMISSIONS DEADLINE</b> <i>ESS Application portal closes at 15:00 UTC, Reykjavik Iceland</i>	<b>31 JANUARY 2022</b>
<b>FUNDING DECISION FEEDBACK</b> <i>Tentative date</i>	<b>JUNE 2022</b>
<b>FUNDED PROJECTS START</b> <i>Tentative date for the project start</i>	<b>SEPTEMBER 2022</b>

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<sup>1</sup> Project proposals must be submitted electronically. More information about the Joint Call and the online Electronic Submission System can be found at the GEO THERMICA & JPP SES website: [link here](#)

## 2 Background – Heating and cooling transition

Climate-neutral Heating and/or cooling is essential for the ambitious climate and energy targets of many European countries and globally. Heating and cooling account for about half of the total end-use energy demand in Europe. The annual consumption of thermal energy in Europe amounts to about 5.600 TWh, against 2.700 TWh of electricity and 4.000 TWh used in the transport sector. In 2018<sup>2</sup>, only 21% of thermal energy was generated from renewable energy sources (RES) (EUROSTAT, 20). The demand for cooling is limited on a European scale but is expected to increase. There is considerable scope for accelerating the use of renewable and excess heat and cold to accelerate the path to a climate-neutral energy system. This energy system should also be fully adaptable to seasonal variations in heating and cooling demand.

With the communication "an EU strategy on heating and cooling" (COM (2016) 51 final), in February 2016, the European Commission strongly emphasised the role of heating and cooling in the decarbonisation process. This new attention led to the target of a 1,3% annual average increase of RE in Heating and cooling, as mandated by the 2018 recast of the Renewable Energy Directive (Directive 2018/2001). The Renewable Energy Directive set the target of 32% RE by 2030; overall, about 40% of this share is projected to come from the heating and cooling sectors.

RES for heating and cooling utilises solar irradiation (solar thermal, concentrated solar), ambient heat and cold, regional biomass in various technologies, and geothermal energy. heat pumps and thermal storage technologies are an integral part of RES heating and/or cooling technologies. Low-carbon heating and cooling technologies also include the use of excess heat and cold, e.g., from industrial processes and data centres. Heating and cooling demand for industrial processes cover the entire temperature range, with energy-intensive industries having a large share of demand at high temperatures which can for example be met by concentrated solar technology etc.

Transforming the global landscape of heating and cooling solutions towards a decarbonised, secure and resilient energy system will need holistic system solutions incorporating technologies that can be replicated and scaled. Achieving the goals of the Paris Agreement requires more ambitious and faster emission reductions. Many countries worldwide are working to accelerate global clean energy innovation to support energy systems' transition to clean energy systems. In this development, sustainable heating and cooling solutions will be a central part of evolving integrated energy systems. Such smart energy systems will be more connected, intelligent, efficient and reliable, and by including renewable energy sources, also more sustainable. Interoperability of different energy vectors is also a theme where heating and cooling solutions and their integration into the energy system will be essential.

There is great potential in accelerating the heating and cooling transition by research and innovation, focusing on improving technologies and/or the related system integration aspects. The transition of the heating and/or cooling supply and storage, and the system-level challenges, are critical for the transition towards a 100% climate-neutral heating and/or cooling supply.

To reach these strategic targets and increase the share of climate-neutral heating and/or cooling, the technological advance must be coupled with understanding and innovation related to business models, market strategies, user-oriented development, local and regional dimensions and processes for engagement of private and public stakeholders.

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<sup>2</sup> Source: Renewable energy for heating and cooling - Products Eurostat News - Eurostat (europa.eu)

### 3 National Funding Agencies

The budget available for this Joint Call from each national funding agency is approximately M€32 (Table 1).

Table 1. List of participants

Participants	Funding Organisation (Program Owner / Program Manager)	Network	Budget M€
Austria	Austrian Research Promotion Agency, <b>FFG</b>	SES	1.83
Wallonia	General Directorate of Territoire, Logement, Patrimoine, Energie, <b>SPW DG TLPE</b>	SES	0.6
Denmark	Energy Technology Development and Demonstration Program, <b>EUDP</b>	GEOthermica	3.0
	Innovation Fund Denmark	SES	1.0
Germany	German Federal Ministry for Economic Affairs and Energy <b>BMWi</b> (geothermal)	GEOthermica	2.5
	German Federal Ministry for Economic Affairs and Energy <b>BMWi</b> (solarthermal)	GEOthermica	1.0
	German Federal Ministry for Economic Affairs and Energy <b>BMWi</b> (CSP)	GEOthermica	1.0
Hungary	National Research, Development and Innovation Office, <b>NKFIH</b>	SES	0.2
Iceland	Icelandic Research Institute, <b>RANNIS</b>	GEOthermica	0.5
Ireland	Geological Survey Ireland, <b>GSI</b>	GEOthermica	0.3
	Sustainable Energy Authority of Ireland, <b>SEAI</b>	SES	0.5
Israel	Ministry of Energy Chief Scientist Office, <b>MoE-IL</b>	SES	0.6
Netherlands	Netherlands Enterprise Agency, <b>RVO</b>	GEOthermica	8.0
Norway	The Research Council of Norway, <b>RCN</b>	Both	1.0
Scotland	Scottish Enterprise, <b>SE</b>	SES	1.1
Sweden	Swedish Energy Agency, <b>SWEA</b>	SES	2.0
Switzerland	Swiss Federal Office of Energy, <b>DETEC - SFOE</b>	Both	3.5
Turkey	The Scientific and Technological Research Council of Turkey, <b>TÜBİTAK</b>	Both	0.75
USA	Department of Energy, <b>DOE</b>	GEOthermica	3.3

## 4 Objective of the Joint Call GEOTHERMICA & JPP SES

Heating and cooling demand accounts for around half of global final energy consumption. Of this, nearly 50% is consumed in industrial processes, while another 46% is used in residential and commercial buildings – for space and water heating and, to a lesser extent, for cooking. The remainder is used in agriculture, not only to heat greenhouses but also for drying, soil heating and aquaculture. Most of this energy comes either from fossil fuels or inefficient uses of biomass. Heating and cooling, consequently, is a major source of air pollution and accounts for over 40% of global energy-related CO<sub>2</sub> emissions.<sup>3</sup> Moreover, the use of energy for space cooling is growing faster than for any other end use in buildings, more than tripling between 1990 and 2016.

JPP SES and ERA-NET GEOTHERMICA join forces to accelerate the heating and cooling transition, enabling 100% climate-neutral heating and/or cooling by 2050.<sup>4</sup> This requires innovation and demonstration for heating and cooling or one of the chosen technologies and their integration into the regional and local energy system. This is urgent, and typical solutions should be ready for large-scale implementation in 2030 or earlier because the transition needs to accelerate now in many countries and regions.

The Joint Call's objective is to accelerate the heating and cooling transition through research, development, demonstration, and innovation. Projects should significantly impact the heating and/or cooling transition against the broader energy transition's backdrop and other relevant societal processes. The "Accelerating the heating and/or cooling transition" Joint Call addresses technology development, system integration, and innovation, with an emphasis on market-driven projects that are ready for large-scale implementation before 2030. Projects should develop innovative solutions or new concepts, preferentially suitable for retrofit applications - for maximum impact. The focus in projects should be on the thermal energy system, heating and/or cooling systems. Projects developing broad technologies for geothermal energy are also welcome in those funding organisations that are GEOTHERMICA Network members; please consult Annex 1 for national guidelines. A cross-sectoral and interdisciplinary approach will often be required. This interdisciplinary and cross-sectoral approach can be structured along with several layers, including 1) problems related to technology, 2) stakeholder/adoption, and 3) goods and services (see Figure 1 for guidance). Where applicable, the local and regional available renewable resources, system integration of technologies, integration in urban planning, services, and tools, potential synergies in infrastructures, a convergence of technology and application areas, as well as basic design principles (security and privacy, resilience, energy and resource efficiency of equipment and components) should also be considered.

The focus should be on thermal energy systems, and technologies should preferentially be suitable for retrofit, overall contributing to one or more of the following objectives:

- **Climate-neutral resources** for heating and/or 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

<sup>3</sup> Retrieved from IRENA report Renewable Energy Policies in a Time of Transition Heating and Cooling, accessed on March 31, 2021 [link here](#)

<sup>4</sup> The Future of Cooling Opportunities for energy efficient air conditioning, IEA, 2018



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.

Participating funding organisations will clarify the national/regional funding possibilities in detail in Annex 1 Specific Funding Agencies' Rules and Eligible Scope of this Call Text. A national/regional focus on specific issues is subtle and creates opportunities for complementarity and joint progress.

## 5 Scope

The GEO THERMICA and JPP SES Joint Call "Accelerating the heating and/or cooling transition" targets projects with a significant impact on the heating and/or cooling transition. The concept of the Joint Call combines integration issues and technology development. Figure 1 illustrates this.

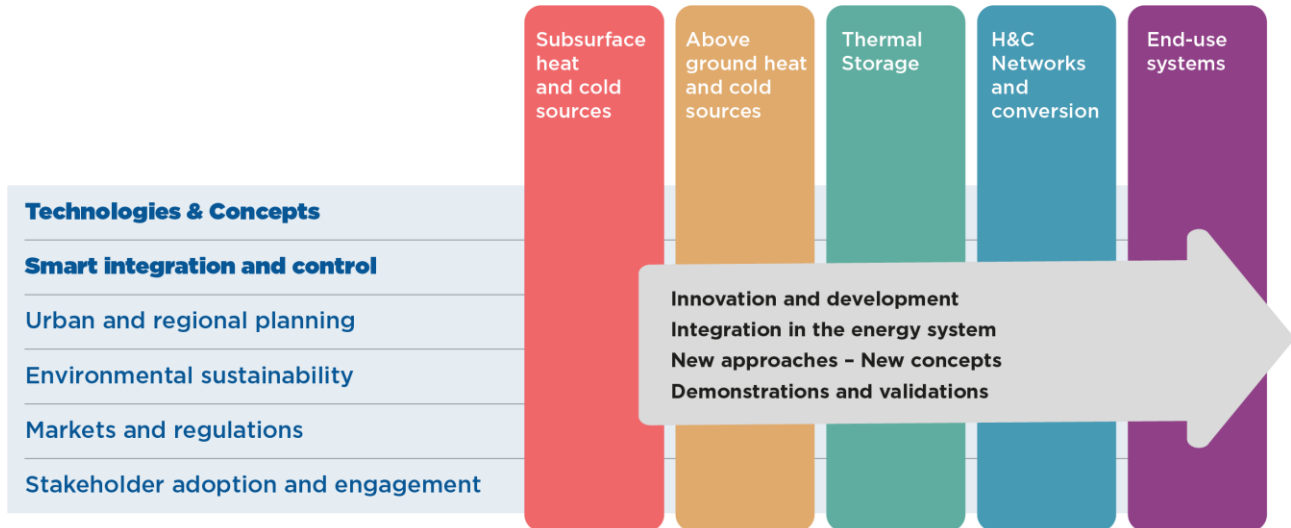


Figure 1 Model of the thematic concept features

Figure 1 schematically shows the scope of the Joint Call. The horizontal bars indicate essential 'areas of interest' to adopt innovations in society. The vertical bars indicate the technological scope. Some of the horizontal bars are in bold because they form the core of this transnational collaboration. The arrow in the figure symbolises the forward and future-oriented approach that builds on these various aspects. Projects can address any topics within the scope of Figure 1. However, the funding organisations and the funding programmes participating in the Call will have limitations regarding eligible issues and/or cost. Please refer to Annex 1 for the details per country and funding programme.

The vertical bars show that projects may address various parts of the heating and/or cooling supply chain, which covers all stages in the development chain of secure, sustainable, competitive and affordable Heating and/or cooling installations:

- Sub-surface climate-neutral heat and cold sources: geothermal energy from the shallow and deeper subsurface, including exploration, resource development techniques and operation.
- Above-ground heat and cold sources, including but not limited to solar thermal, local and regional excess resources, concentrated solar for (industrial) thermal energy purposes, ambient heat and cold from the air, surface water, sewers etc.
- Thermal storage, including but not limited to large-scale seasonal subsurface thermal storage, small-scale hour-to-day thermal storage, smart systems balancing supply and demand, excess power to thermal energy.
- Heating and/or cooling networks, conversion and integration, including but not limited to integration of renewable energies such as geothermal and solar thermal, innovations for more cost-efficient heating and/or cooling networks, retrofit of heating and/or cooling networks, conversion technologies such as heat pumps, and technologies for sector coupling, and smart integration.
- End-use systems: distribution systems within the end-user system (typically a building or a home) are a relevant part of the heating and/or cooling system because the temperature level matters.

A significant proportion of the projects resulting from this Call are expected to focus on district heating and/or cooling systems, which does not preclude projects with different scopes and projects on industrial heating and cooling innovation. The project should address one or more of the abovementioned elements of the heating and/or cooling chain. A significant proportion of the projects is also expected to focus on local and regional sources. Again, this does not preclude projects with different scopes.

The horizontal bars consider relevant 'areas of interest' to support innovation in a sustainable society. Determinants of technological change are found in individual firms or research institutes, and a broad societal structure and system integration aspects constitute an important focal area in this Call. Projects are encouraged to include these areas in their work plan if relevant:

- Technologies and concepts; enabling: which technology do we need? (Development of new technologies and concepts and the related RD&I, and bringing these solutions towards a transnational proof of concept and possibly demonstration)
- Smart integration and control focus on the energy system level. Transforming the global landscape of energy supply and solutions towards a decarbonised, secure and resilient energy system will need holistic system solutions incorporating technologies that can be replicated and scaled.
- Urban and regional planning of energy systems: Innovations to plan future energy system infrastructure and modernise existing energy systems. The inclusion of industry actors and all types of excess heat is also encouraged.
- Environmental sustainability is an important boundary condition for future technologies.
- Markets and regulations: structuring how do we organise it? (Business models, regulatory frame, market design, economic research, etc.)
- Stakeholder involvement and engagement: overcoming why do or do not we do it? (Innovation and transition, user-oriented development, consumer acceptance, education, policy, retail, community/society, social research, etc.)

The figure sets out a broad scope, but not all participating funding organisations and funding programmes will fund activities related to all aspects within the generic scope. It is crucial to consult Annex 1, where funding organisations specify what they can fund. All proposers need to check these requirements and limitations in their own country or region in Annex 1 Specific Funding Agencies' Rules and . Consulting the National Contact for the JPP SES and GEO THERMICA Joint Call is highly recommended. For clarity: all project partners are funded from their own country or region. It is impossible to apply for funding in other countries or regions than in your own country or region. However, it is possible to collaborate with partners from other countries or regions that work on the aspects that might not be eligible for funding in your own country or region.

Project proposals must illustrate how their projects may help accelerate the time to market secure, sustainable, competitive, and affordable Heating and/or cooling solutions. Project proposals can also focus on bringing upcoming technologies to a level of validation in a relevant environment and concentrating on integrating into already viable and on-going projects, especially if no suitable demonstration or pilot plants are available. Trans-national projects may, of course, collaborate with existing and future pilots and/or demonstration plants.

Projects need to assess the Technology Readiness Level (TRL) (i) before their work and (ii) indicate by how many levels the technology readiness advances in case of a successful outcome of their project. Projects funded by this Call should improve business cases based on research and innovation. Projects need to aim at advancing TRLs 5-9. There will be an emphasis on market-driven projects that are ready for large-scale implementation in 2030. However, projects may include lower TRL's depending on national funding rules.

**Table 2 Technology Readiness Level (TRL)- scale definitions**

Level	Scale definitions
TRL1	basic principles observed
TRL2	technology concept formulated
TRL3	experimental proof of concept
TRL4	technology validated in lab
TRL5	technology validated in relevant environment
TRL6	technology demonstrated in relevant environment
TRL7	system prototype demonstration in operational environment
TRL8	system complete and qualified
TRL9	actual system is proven in operational environment

GEOthermica & JPP SES projects may connect in a supporting manner to existing/on-going projects. Project proposals should include industrial partners, as far as this is possible and sensible. This is also in line with the specific requirements of the national and regional funding agencies. Projects that have a demonstration character with correspondingly strong industry participation are encouraged.

GEOthermica & JPP SES Joint Call considers that proposals requesting a contribution of between €1.5-4 million each would allow successful projects to address the scope appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts. Especially projects that include demonstrations might require higher budgets.

There will be two ranking lists, one for large demonstration projects that ask for a contribution over €2 million, and the other one for all other projects. The available budget of about €30.2 million will be allocated to each of the two ranking lists envisaged in the following manner:

- Type A ("large"): approx. 2/3 of the funding budget will be available for large trans-national demonstration projects with minimum funding requests of €2 million per project.
- Type B ("small"): approx. 1/3 of the funding budget will be available for smaller trans-national research and innovation projects with a funding request of less than €2 million per project.

## 6 Rules for Participation

GEOthermica & JPP SES rules apply to all applicants. There are specific national and regional funding agency rules in addition to general rules (see Annex 1 Specific Funding Agencies' Rules and Eligible Scope). Therefore, applicants are subject to this Call's guidelines and their respective national or regional funding agencies' rules and regulations.

The term "proposal" is used for the pre-proposal in the first stage of the evaluation procedure and "full proposal" in the second stage.

### 6.1 Who can participate and apply?

We encourage consortia with a wide geographic spectrum, but at least three eligible applicants from at least two participating countries must be in the consortium. Each project consortium must demonstrate the alignment with the respective funding bodies' national interest (see Annex 1 Specific Funding Agencies' Rules and Eligibility Scope) and must demonstrate the applicants' competence to undertake the project specified themes.

Projects are strongly encouraged to involve "need-owner(s)"<sup>5</sup> and relevant stakeholders from the national/regional innovation ecosystem in all project phases to maximise market acceptance and uptake within the development of technologies and solutions.

#### 6.1.1 Main Applicant's role

The Main Applicant will be responsible for the overall coordination and submission of the pre-and full proposals and executing and managing the project. The Main Applicant will also be referred to as the Coordinator in the application template. The Main Applicant will be the contact point with GEOthermica & JPP SES on behalf of the whole consortium. It will be responsible for the administrative management of the complete project, should it be awarded funding. The Main Applicant is a legal entity whose representative is responsible for leading the overall project. The Main Applicant must be eligible for financing from its funding agency; otherwise, the whole project will be rejected. The specific eligibility rules of the respective funding agency apply to the Main Applicant.

#### 6.1.2 Co-Applicant's role

Each Co-Applicant is a legal entity with due representation. There may be more than one Co-Applicant from any one country. If there is more than one Co-Applicant from a country, one needs to be identified as the national consortium leader. The national consortium leader will act as the focal point for the national funding agency and for the GEOthermica & JPP SES partners outside that country. The specific eligibility rules of the respective funding agency apply to the Co-Applicant.

#### 6.1.3 Co-operation Partners

Partners from countries not participating in GEOthermica & JPP SES, or partners that are not eligible for funding from GEOthermica & JPP SES funding authorities, and partners that choose not to apply for funding, may be included in a project as Co-operation Partners. Co-operation Partners can be included in the project consortium if (a) they finance their activity from other sources than GEOthermica & JPP SES, b) the consortium, in general, fulfils the requirements on the number of applicants from participating countries and (c) their participation is approved by the GEOthermica & JPP SES Call Secretariat. Project consortia

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<sup>5</sup> By „need-owner“ this call refers to the role of an entity (e.g. public agency, local/regional authority, energy grid manager/owner, company, building owner etc.), that seek a solution to a specified need (problem) within its area of operation. The “need-owner” has practical insights into what the actual need is and an interest to be involved in the development of a solution. This ensures the development of an optimal solution and facilitates the “need-owner(s)” acceptance and implementation of the solution. There can be more than one “need-owner” to the same need.

involving Co-operation Partners must ensure that project results will be relevant for GEOthermica & JPP SES countries.

## 6.2 Eligibility requirements and recommendations

Please note that the following are fundamental eligibility criteria for this GEOthermica & JPP SES Joint Call, but there are variations in eligibility, depending on the national and regional rules. All applicants must check the summaries of national regulations in Annex 1 Specific Funding Agencies' Rules and Eligible Scope and must consult their national or regional contact point Table 4: National Contact Points contact details (NCP) to ensure that they understand the requirements and that the applicant, project and activities meet the eligibility criteria. The GEOthermica & JPP SES call secretariat will verify formal compliance with the rules of this Call. According to their respective eligibility criteria, the participating funding agencies will verify the eligibility and suitability for national funding, as defined in Annex 1 Specific Funding Agencies' Rules and Eligible Scope Annex 1 Specific Funding Agencies' Rules and .

Compliance with national or regional rules and guidelines for state aid is crucial. Each applicant and the overall proposal must provide data and statements to the GEOthermica & JPP SES funding organisations so they can assess and confirm that a GEOthermica & JPP SES project is following state aid regulations.

Suppose either the Main Applicant or the scope of the pre-proposal does not meet the eligibility requirements. In that case, the pre-proposal will not be admitted to the full proposal evaluation procedure (stage 2). In case a Co-Applicant is not eligible, the pre-proposal may still be eligible without the ineligible Co-Applicant as long as the pre-proposal and its other applicants meet the eligibility criteria. In both cases, this will be communicated to the Main Applicant.

For clarity, only consortia invited to the second stage are allowed to submit a full proposal. Invitation to stage 2 of the evaluation does not imply that the proposal will be awarded funding. It merely enables submitting a full proposal and participation in the second stage evaluation procedure (Section Submission and Evaluation). Please note that in the full proposal phase an ineligible applicant can result in a proposal that no longer meets "at least three eligible applicants in two participating countries". Also, please note that Section 6 in the Full Proposal Template asks how the project can be implemented when any partner is deemed not eligible.

Once all contracts have entered into force, projects should be completed within three years. Extensions will only be granted if the delay can be justified and is outside the control of the project partners. Any extension of a project must be approved by all funding agencies involved.

## 6.3 Project consortium

The added value resulting from transnational co-operation must be addressed in the proposal. Co-operation must be balanced – all partners need to make meaningful contributions to the project budget, activity and outcomes. For all applicants and partners in a consortium, in addition to the following points, also note the mandatory compliance with the Specific Funding Agencies' Rules (Annex 1 Specific Funding Agencies' Rules and Eligible Scope):

- Consortia may consist of applicants and partners from companies, research organisations, universities and higher education institutions, industry organisations, local/regional governments and NGOs;
- Consortia may consist of applicants and partners across several positions and disciplines within research and development systems (i.e. basic research, applied research, innovation, business etc.);

- For any project, consortia are required to prove the interest for active involvement in the project by all applicant(s) and partner(s) by way of Letters of Intent (stage 1) and Letters of Commitment (stage 2);
- A Letter of Intent is required for all applicants and partners when pre-proposals are submitted. Such a letter must contain an explicit declaration of any financial or in-kind contribution agreed upon and the role of the applicant or partners;
- All applicants or partners in a consortium have to provide Letters of Commitment when full proposals are submitted. In-kind contributions such as personnel, equipment, subcontracting, consumables, overheads etc. need to be specified in terms of person-hours/-months and materials;
- Members of project consortia may abstain from receiving funding.

Interested parties may register on the following website:

1. Matchmaking platform for Joint Call 2021 – <https://jpp-ses-geothermica-matchmaking-jointcall.eranet.b2match.io/>

Applicants looking for project co-applicants can find potentially interested parties listed in those sections. If they wish to be listed themselves, they should contact their national contact person or register to the matchmaking platform online to find possible partners.

## 6.4 Project timing and duration

Projects may be funded for a maximum of 3 years and are targeted to start no later than 31 December 2022 . Check for additional constraints in the Specific Funding Agencies' Rules (Annex 1 Specific Funding Agencies' Rules. While the exact starting date may depend on the budget allocation (rules) of involved funding agencies, a project's end date should be harmonised across all applicants in the same consortium.

Funding agencies may choose to issue or endeavour to issue Letters of Intent or Letters of Commitment to ensure a project's timely start.

Funded projects should be completed within three years and should not run beyond 31 December 2025. . Projects not meeting the deadline may incur a loss in funding or the obligation to repay funding already received.

The proposal must include justification for the requested budget. The estimated budget must be given in **Euros only**. All costs must be eligible according to the funding agencies' rules (see Annexe 1). In case of doubt, applicants should consult the national or regional contact points (Table 4) in the respective funding agencies, who can advise on funding rules.

### 6.4.1 Funding agencies' rules and eligibility criteria

In addition to the general rules and procedures laid down in this document, the applicants follow specific funding agencies' rules. They can be manifold such as funding agencies' eligibility criteria for organisations, co-funding requirements, national evaluation rules, maximum funding per applicant or project, etc. Applicants must contact their national or regional contact points (Table 4) and be thoroughly familiar with the requirements of the respective funding agency (see «Annex 1 Specific Funding Agencies' Rules and ») before submitting a proposal. Please note the requirements regarding the types of activities, which different funding agencies can support.

***Both transnational (GEOthermica & JPP SES) and funding agencies' eligibility criteria must be positively met.***

#### **6.4.2 Language**

The proposals must be prepared in English. Proposals written in other languages will not be accepted. Corresponding submissions to national or regional funding agencies may have to be submitted in the country's official language (ref. Annex 1 Specific Funding Agencies' Rules and ).

#### **6.4.3 Instructions regarding the form and structure of the pre-proposal and full proposal**

The electronic submission system requires a standard form to be filled out with key data of the proposal. Further information will be provided and updated (see the electronic submission system for proposals to the call on <http://www.geothermica.eu/call-to-action/electronic-submission-system/>)



## 7 Submission and Evaluation

### 7.1 Submission

All pre-proposals (stage 1, see template Annex 2: Template for pre-proposal and Annex 4: Table for budgeting) and full proposals (stage 2, see template Annex 3: Template for full proposal and Annex 4: Table for budgeting) to the GEOTHERMICA & JPP SES Joint Call must be submitted via the electronic submission system (ESS) of the Call Secretariat, accessible via the web pages of GEOTHERMICA & JPP SES.

***The electronic submission system ESS will open in June 2021.***

***The pre-proposal must be submitted before the deadline of 4 October 2021.***

***The full proposal must be submitted before the deadline 31 January 2021.***

An **online help document for submission** is provided by the Call Secretariat when the ESS opens.

Details are available at the websites:

1. <http://www.geothermica.eu/call-to-action/electronic-submission-system/>
2. <https://www.eranet-smartenergysystems.eu>

**National Submission:** Please note that many funding agencies will require, in parallel, national submission of the national part of the proposal according to the rules of the specific funding agencies. Regarding additional national requirements for submitting documents at the national level, you must carefully check «*Annex 1 Specific Funding Agencies' Rules and*».

It is impossible to resubmit the pre-proposal/full proposal or parts of it or revise the pre-proposal/full proposal after the submission deadline.

The pre-proposal/full proposal will only be accepted if signed Letters of Intent (pre-proposals) and Letters of Commitment (full proposals) from all Co-Applicants / Co-operation Partners are included as appendices (typically pdf) to the proposal. Such Letters of Intent and Commitment may be submitted in various formats (formal letters, signed e-mails, etc.). The Main Applicant has to ensure that the respective legal representatives duly sign all partners' letters in due time.

### 7.2 Data Protection

The content of project proposals submitted to the GEOTHERMICA & JPP SES Joint Call will be used by the funding agencies of the joint call consortium, maybe the European Commission, and by the independent evaluators to assess and evaluate proposals, and subsequently by the GEOTHERMICA & JPP SES consortium for monitoring projects, which are selected for funding.

The whole content of the pre-and full proposals received under the Call will be treated as confidential, except the list of projects selected for funding and publishable project abstracts. Proposals and evaluation reports will be stored and accessed within the secure joint call submission system. Independent evaluators will be required to sign declarations concerning confidentiality and conflicts of interest before they can access proposal details on the joint call submission system (ESS).

By submitting your proposal, you agree that the proposal is forwarded to the relevant funding agency and all other participating funding agencies involved in the GEOTHERMICA & JPP SES joint call. For full proposals, you also agree that the proposal is forwarded to independent evaluators. Please observe that both national funding agencies and evaluators are subject to stringent confidentiality rules.

If you still have technical questions about the system's use after reading the instructions in this Call text and the GEOHERMICA & JPP SES websites, please contact the Call Secretariat in Iceland (Section 9 Contacts and Further Information).

## 7.3 Evaluation

### 7.3.1 Evaluation procedure

Within the framework of the GEOHERMICA & JPP SES joint call, a **two-stage procedure** will be adopted.

#### 7.3.1.1 Stage 1:

The pre-proposals will be assessed based on national eligibility criteria (see Annex 1 Specific Funding Agencies' Rules and ). For each of the pre-proposals, the respective funding agencies from whom funding will be requested perform an eligibility check. Eligibility criteria vary from one country/region to another (see Specific Funding Agencies' Rules (Annex 1 Specific Funding Agencies' Rules and ) and contact your national contact point (as identified in Table 4). Only those pre-proposals that fulfil national or regional eligibility criteria will be invited to elaborate and submit full proposals. Beware that a pre-proposal can be rejected, so make sure that your pre-proposal sufficiently explains how it aligns with both the objectives of this Call and the national/regional rules and objectives. It is also strongly recommended that the project coordinator verifies that the project partners contact their National Contacts to check their eligibility and funding request to avoid the rejection of the entire proposal. Criteria marked \* will apply for evaluation of pre-proposals. Decisions by the GEOHERMICA & JPP SES Call Secretariat regarding the invitation to elaborate and submit full proposals are final without any possibility for recourse.

If an applicant is declared ineligible and does not fulfil the Main Applicant's role, the Consortium may be invited to replace that ineligible applicant as long as all this Call's rules are complied with. In this instance, there must be neither a substantial change in the planned output of the project nor a significant change in the total budget requested from the funding organisations. A confirmation of the eligibility, hence the acceptability by the relevant funding organisation, is required.

#### 7.3.1.2 Stage 2:

Full proposals will be re-checked for national eligibility (see Annex 1 Specific Funding Agencies' Rules and Eligible Scope). Only full proposals with confirmed positive national eligibility checks will undergo stage 2 evaluation and subsequent ranking.

However, if in stage 2 an applicant is declared ineligible and does not fulfil the role of Main Applicant, the independent international expert panel (see below) will consider a full proposal under the assumption that the ineligible applicant(s) will not be able to contribute to the project with all its consequences. In such a case of one or more ineligible co-applicant, the remainder of the project (applicants, work packages, deliverables, etc.) must still comply with all GEOHERMICA & JPP SES joint call rules.

Eligible full proposals will be evaluated in an open competition where an independent international expert panel will evaluate proposals according to evaluation criteria (Table 3) followed by a ranking of the proposals. Only full proposals with confirmed positive national eligibility checks will be assessed and ranked.

The independent international expert panel will consist of recognised experts in the relevant fields of the Call's scope/objectives, academics, and practitioners and innovators, who can assess the scientific and innovative and practical values of the submitted projects. The panel will be appointed by the GEOHERMICA and JPP SES joint call secretariat and funding organisations participating in the Joint Call. Applicants will have no possibility for a rebuttal to the panel's evaluation. There will be at least three experts per proposal.

Based on the panel's ranking and taking into account the available (national/regional) budgets and rules, the participating national and regional funding agencies of GEOthermica and JPP SES will make funding decisions.

For each full proposal, the Call Secretariat will send a written statement on the full proposal's evaluation of this proposal's Main Applicant. The Call Secretariat will inform the Main Applicants of projects that have been recommended for funding. The national funding agencies will inform the applicants in their countries of what further action needs to be taken at this stage.

**Note:** Each project recommended for funding should have a signed consortium agreement between all partners before starting the project. The consortium agreement will at least address the following topics:

- Internal organisation and management of the consortium;
- Intellectual Property arrangements;
- Settlement of internal disputes;

While the consortium agreement has a free format, the [DESCA model](#) is suggested as a template. If any project partner is located outside Europe, adaptations to DESCa will probably be needed. In case of US partners, consult the national Annex of the USA.

### 7.3.2 Evaluation criteria

According to the following criteria (Table 3), proposals will be evaluated with ranking lists subsequently produced for both the large and the small project categories. Scores will be awarded for each of the three criteria.

**Table 3: Evaluation criteria for GEOthermica & JPP SES Joint Call**  
(all requirements will apply in stage 2)

<b>Excellence – Weight 30%</b>	5 points
<ul style="list-style-type: none"> <li>• Relevance and clarity of the project's objectives*</li> <li>• The credibility of the proposed technology/concept and approach – including trans-disciplinary considerations, where relevant*</li> <li>• Quality of the innovation and ambition related to state of the art in the respective countries*</li> <li>• Innovation content of the project relevant to the Call</li> </ul>	
<b>Impact (potential impact of the results of the project) – Weight 40%</b>	5 points
<ul style="list-style-type: none"> <li>• Expected contribution to the accelerated deployment of climate-neutral heating and cooling systems, also with a view on suitability for retrofit.*</li> <li>• Project's ability to strengthen the competitiveness and growth of their relevant industrial sectors</li> <li>• Demonstration of the added value of trans-national collaboration</li> <li>• Replicability in regions in Europe or worldwide</li> <li>• Strength of the proposed exploitation and dissemination plans (including management of data and intellectual property rights)</li> <li>• Impact on environmental or socially important aspects</li> </ul>	
<b>Quality and efficiency of the implementation of the project – Weight 30%</b>	5 points
<ul style="list-style-type: none"> <li>• Coherence and expected effectiveness of the project plan, including the participation levels of industry, appropriateness of tasks, coherence of budget with the tasks, use of methods and human resource allocation incl. qualification of consortium members.</li> <li>• Quality of project structure, clarity of deliverables and milestones with a clear breakdown of activities associated with budget allocation.</li> <li>• Timing and scheduling of the project and identification of dependencies and critical path with a particular focus on realistic timelines, availability of concessions, permits, and regulatory approvals*</li> <li>• Strength of management structures and governance procedures, including risk management, gender equality</li> <li>• The partners' capability to deliver the project and commercialise the technology further - including, e.g., the suitability of expertise, complementarity, and the balance of contributions.*</li> </ul>	

### 7.3.3 Gender equality

There will be no discrimination due to gender in the processing of applications and the project's implementation. When scored equally after the evaluation, the availability of the budget will be the first selection criterion. As a second selection criterion, GEOthermica & JPP SES will prefer projects with better gender balance at the project consortium's leadership level.

### 7.3.4 Scoring and thresholds

Experts will evaluate based on the criteria 'excellence', 'impact' and 'quality and efficiency of the implementation'. Evaluation scores will be awarded for each criterion as a whole, taking into account the different subcriteria listed in Table 3. For full proposals, each criterion will be scored by the Expert Panel, using the following scale:

- 0) Unacceptable
- 1) Weak
- 2) Average
- 3) Good
- 4) Very good
- 5) Excellent.

Half marks will be used. Proposals have to have a minimum score of 3 in each of the three criteria. The overall minimum total threshold, the sum of the three scores in each of the three criteria, is 10.

### 7.3.5 Time Schedule

31 May 2021	Call open for pre-proposals
4 October 2021	Deadline Submission of pre-proposals
30 November 2021	Invite applicants to submit full proposals
31 January 2022	Deadline Submission of full proposals
June 2022	The tentative date for funding recommendation and announcement of results to Main Applicants
September 2022	The tentative date for national funding decisions and contracts completed. Start of projects

### 7.3.6 Documentation and forms

All documents for public release related to this joint Call are published on the following websites.

1. <http://www.geothermica.eu/joint-call-2021/>
2. <https://www.eranet-smartenergysystems.eu>

## 8 Project monitoring and reporting

Project monitoring and reporting will be following the respective funding agency's rules. In addition to funding agencies' requirements, the Main Applicants of consortia have to submit a straightforward half-yearly progress report and annual financial reports (both in English) to the Call Secretariat run by GEOthermica & JPP SES Office. The annual reports include a description of the consortium's transnational co-operation and a publishable summary of the project status. A Midterm review can be part of the monitoring requirements. Also, the project should present a single publishable and public final project report, which describes the activities and outcomes of the work.

Any substantial change in an on-going project must be reported immediately to both the GEOthermica & JPP Call secretariat and the funding agencies involved, using the Joint Call Monitoring Guidelines.

The consortia should also consider planning and budgeting that in-person project reporting is expected, particularly at knowledge-sharing workshops/events organised by GEOthermica, JPP SES, or both. Applicants should be aware of the core ideas of the SES Knowledge Community. It is recommended to consider active participation in such events when planning the project work plan and budget, especially for those projects with strong links to the smart energy systems work.

## 9 Contacts and Further Information

### 9.1 General information on the joint Call

Updated information (including regularly updated Questions and Answers) on this Joint Call and all relevant documents/templates are published on <http://www.geothermica.eu> and <https://www.eranet-smartenergysystems.eu>.

If you have questions on the general call process and proposal submission, please contact the **Joint Call Secretariat at the GEOthermica & JPP SES Office:**

For technical issues:	For submission issues:
<b>Alicja Wiktoria Stoklosa</b>	<b>Svandis Unnur Sigurdardottir</b>
<b>GEOthermica Office</b> Orkugarður, Grensásvegur 9, IS-108 Reykjavík / Iceland	<b>Rannis</b> Borgartun 30 IS-105 Reykjavik, Iceland
Tel: +354 777 6980	Tel: +354 515 5800
E-mail: <a href="mailto:info@geothermica.eu">info@geothermica.eu</a>	Email: <a href="mailto:svandisu@rannis.is">svandisu@rannis.is</a>

### 9.2 Contact points of participating funding agencies

For questions regarding specific funding agencies' rules and additional forms, please check "Annex 1 Specific Funding Agencies' Rules and " first. Trans-national project partners must contact the national contact persons of the respective funding agency. Additional information can be obtained by contacting the indicated national contact persons at the participating funding agencies.

**Table 4: National Contact Points contact details (NCP)**

	Country	Organisation	Name	E-mail	Phone
1	Austria	Austrian Research Promotion Agency, <b>FFG</b>	Urban Peyker	<a href="mailto:urban.peyker@ffg.at">urban.peyker@ffg.at</a>	+43 577555049
2	Belgium Wallonia	General Directorate of Territoire, Logement, Patrimoine, Energie, <b>SPW DG TLPE</b>	Gilles Tihon	<a href="mailto:gilles.tihon@spw.wallonie.be">gilles.tihon@spw.wallonie.be</a>	+32 81486353
3	Denmark	Energy Technology Development and Demonstration Program <b>EUDP</b>	Mette Jessen Schultz	<a href="mailto:mjsc@ens.dk">mjsc@ens.dk</a>	+45 33926799
4	Denmark	Innovation Fund, <b>InnoFund</b>	Sune Dalgaard Ebbesen Jens Peter Vittrup	<a href="mailto:sune.dalgaard.ebbesen@innofond.dk">sune.dalgaard.ebbesen@innofond.dk</a> <a href="mailto:jens.peter.vittrup@innofond.dk">jens.peter.vittrup@innofond.dk</a>	+45 6190 5030 +45 61905023
5	Germany	German Federal Ministry for Economic Affairs and Energy BMWi; <b>Solarthermal</b> <b>CSP</b> <b>Geothermal</b>	Kerstin Krüger Tarik Schwarzer Stephan Schreiber	<a href="mailto:k.krueger@fz-juelich.de">k.krueger@fz-juelich.de</a> <a href="mailto:t.schwarzer@fz-juelich.de">t.schwarzer@fz-juelich.de</a> <a href="mailto:k.schreiber@fz-juelich.de">k.schreiber@fz-juelich.de</a>	+49 3020199530 +49 2461619157 +49 2461614743
6	Hungary	National Research, Development and Innovation Office, <b>NKFIH</b>	Orsolya Küttel	<a href="mailto:orsolya.kuttel@nkfih.gov.hu">orsolya.kuttel@nkfih.gov.hu</a>	+36-1-896-5505
7	Iceland	Icelandic Research Institute, <b>RANNIS</b>	Svandís U. Sigurðardóttir Sigurður Björnsson	<a href="mailto:svandis.u.sigurdardottir@rannis.is">svandis.u.sigurdardottir@rannis.is</a> <a href="mailto:sigurdur.bjornsson@rannis.is">sigurdur.bjornsson@rannis.is</a>	+354 515 5800
8	Ireland	Geological Survey Ireland, <b>GSI</b>	Aoife Braiden	<a href="mailto:aoife.braiden@gsi.ie">aoife.braiden@gsi.ie</a>	+353 1 6782650

	Country	Organisation	Name	E-mail	Phone
9	Ireland	Sustainable Energy Authority of Ireland <b>SEAI</b>	Lucy Corcoran	Lucy.Corcoran@seai.ie	+353 1 808 2084
10	Israel	Ministry of Energy Chief Scientist Office, <b>MoE-IL</b>	Olga Zlatkin	olgaz@energy.gov.il	+972-74-7681910
11	Netherlands	Netherland Enterprise Agency, <b>RVO</b>	Paul Ramsak Gerdi Breembroek	paul.ramsak@rvo.nl gerdi.breembroek@rvo.nl	+31 8 8602 2275 +31 6 5256 4480
12	Norway	The Research Council of Norway <b>RCN</b>	Per Arne Karlsen Mari L. Authen	pak@rcn.no mlau@rcn.no	+47 917 27 669 +47 454 66 328
13	Scotland	Scottish Enterprise SE	Karen Fraser Kate Henderson	karen.fraser@scotent.co.uk kate.henderson@scotent.co.uk	+44(0)1414685658
14	Sweden	Swedish Energy Agency, <b>SWEA</b>	Sofia Andersson Emina Pasic Fredrik Lundström	Sofia.andersson@energimyndigheten.se Emina.pasic@energimyndigheten.se Fredrik.lundstrom@energimyndigheten.se	+46 165442445 +46 165442189 +46 165442112
15	Switzerland	Swiss Federal Office of Energy DETEC - <b>SFOE</b>	Céline Weber	cweber@focus-e.ch	+ 41 223671763
16	Turkey	The Scientific and Technological Research Council of Turkey, <b>TÜBİTAK</b>	Kaan Karöz Önder Zor	kaan.karaoz@tubitak.gov.tr onder.zor@tubitak.gov.tr	+903122989466 +903122989456
17	USA	Department of Energy, <b>DOE</b>	Lauren Boyd	lauren.boyd@ee.doe.gov	+1-202-297-8798

## 10 Annex 1 Specific Funding Agencies' Rules and Eligible Scope

Annex 1 includes information about National/Regional Funding Agencies' rules (Table A) and detailed information on an eligible scope (Table B and Table C) for your country or region.

Please contact your National/regional Contact Point to discuss your plans.

### 10.1 Austria | Austrian Research Promotion Agency FFG

**Table A Austrian National Funding Agency rules**

Country/Region	AUSTRIA																			
Funding organisation	Austrian Research Promotion Agency (FFG) <a href="http://www.ffg.at">www.ffg.at</a>																			
National contact person	Urban Peyker, <a href="mailto:urban.peyker@ffg.at">urban.peyker@ffg.at</a> , +43 5 77 55 5049																			
National funding commitment	1,835,000 €																			
Maximum funding per awarded project	1,835,000 €																			
Funding programme	Energieforschung; Federal Ministry for Climate Action																			
Organisations eligible for funding	<p>Legal entities, partnerships and sole traders that are not part of the Austrian federal administration are eligible to receive funding.</p> <p>The following are eligible for funding:</p> <ul style="list-style-type: none"> <li>• Companies of any legal form</li> <li>• Institutions of research and knowledge dissemination <ul style="list-style-type: none"> <li>○ Universities</li> <li>○ Universities of applied sciences</li> <li>○ Non-university research institutions</li> <li>○ Technology transfer institutions, innovation agents and other research-oriented organisations such as associations with a relevant purpose</li> </ul> </li> <li>• Other non-commercial institutions <ul style="list-style-type: none"> <li>○ Local authorities and autonomous bodies</li> <li>○ Non-profit making organisations such as NPOs</li> </ul> </li> </ul>																			
Eligible cost and funding rates	<p>All project-related costs (e.g. Personnel, Equipment, Consumables, Training, Travels, etc.). Eligible costs must be allocable directly to the project. This means that:</p> <ul style="list-style-type: none"> <li>• they are incurred additionally to the normal operating costs during the funding period</li> <li>• they are in accordance with the Funding Contract</li> <li>• they can be evidenced by receipts</li> </ul> <p>Support is paid in the form of non-repayable grants and is limited to a maximum of EUR 2 million per project. The funding rate varies depending on the type of partner.</p> <table border="1"> <thead> <tr> <th>Type of organisation Research category</th> <th>Industrial research Research category</th> <th>Experimental development</th> </tr> </thead> <tbody> <tr> <td>Small enterprise</td> <td>80 %</td> <td>60 %</td> </tr> <tr> <td>Medium-sized enterprise</td> <td>70 %</td> <td>50 %</td> </tr> <tr> <td>Large enterprise</td> <td>55 %</td> <td>35 %</td> </tr> <tr> <td>Research institutions (non-commercial activities)</td> <td>85 %</td> <td>60 %</td> </tr> <tr> <td>Non-commercial institutions(non- commercial activities)</td> <td>80%</td> <td>60%</td> </tr> </tbody> </table>		Type of organisation Research category	Industrial research Research category	Experimental development	Small enterprise	80 %	60 %	Medium-sized enterprise	70 %	50 %	Large enterprise	55 %	35 %	Research institutions (non-commercial activities)	85 %	60 %	Non-commercial institutions(non- commercial activities)	80%	60%
Type of organisation Research category	Industrial research Research category	Experimental development																		
Small enterprise	80 %	60 %																		
Medium-sized enterprise	70 %	50 %																		
Large enterprise	55 %	35 %																		
Research institutions (non-commercial activities)	85 %	60 %																		
Non-commercial institutions(non- commercial activities)	80%	60%																		
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Industrial Research / Experimental Development																			



TRL levels which can be funded	TRL 2-8
Submission of the proposal at the national level	Projects need to submit a national proposal parallel to the transnational Joint Call proposal.
Submission of financial and progress reports at the national level	Projects need to submit progress and financial reports nationally.
Information available at	<a href="https://www.fig.at/eranel/regsys">https://www.fig.at/eranel/regsys</a>
Other	N/A

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Austrian eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Austria

	Subsurface heat and cold sources			Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems				
	Deep Geothermal*	Shallow Geothermal	Other	Solar	Waste heat or cold		Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot	Ventilation	Other
Technology and Concepts	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	O	O
Smart Integration and control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	O	O
Urban and regional planning	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Environmental sustainability																				
Markets and regulations	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Stakeholder adoption and engagement																				

**Table C Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	End-use systems only in the context of the larger energy system, no stand-alone solutions (Single Family Housing)
<b>Smart Integration and control</b>	End-use systems only in the context of the larger energy system, no stand-alone solutions (Single Family Housing)
<b>Urban and regional planning</b>	Only if the development of innovative planning tools is addressed
<b>Environmental sustainability</b>	N/A
<b>Markets and regulations</b>	End-use systems only in the context of the larger energy system, no stand-alone solutions (Single Family Housing)
<b>Stakeholder adoption and engagement</b>	N/A

## 10.2 Wallonie Service Public, SPW

**Table A Wallonia Regional Funding Agency rules**

<b>Country/Region</b>	
<b>Funding organisation</b>	Service Public de Wallonie
<b>National contact person</b>	Gilles Tihon, <a href="mailto:gilles.tihon@spw.wallonie.be">gilles.tihon@spw.wallonie.be</a> , +32 81 48 63 53 Laurence Polain (alternate), <a href="mailto:laurence.polain@spw.wallonie.be">laurence.polain@spw.wallonie.be</a> , +32 81 48 63 42
<b>National funding commitment</b>	600.000,00€
<b>Maximum funding per awarded project</b>	600.000,00€ Fundings vary according to TRL and type of supports (Table available if necessary, 3 Excel sheets) Participation of a private company is mandatory (minimum 40% of total Walloon budget).
<b>Funding programme</b>	DG TLPE
<b>Organisations eligible for funding</b>	According to the rules of SPW TLPE. – Industrial Researches (TRL 3 to 5): Universities, Research Centers, SME, large companies settled in Wallonia – Experimental Development (TRL 6 to 7 (8)): only SMEs and large companies settled in Wallonia – other companies for promotion activities
<b>Eligible cost and funding rates</b>	(Table available if necessary, 3 Excel sheets)
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	See above
<b>TRL levels which can be funded</b>	See above
<b>Submission of the proposal at the national level</b>	Yes, mandatory, within five days of the submission to the Era-Net
<b>Submission of financial and progress reports at the national level</b>	Yes, according to the rules of SPW TLPE
<b>Information available at</b>	The Call will be published at our website: <a href="https://energie.wallonie.be/fr/index.html?IDC=6018">https://energie.wallonie.be/fr/index.html?IDC=6018</a>
<b>Other</b>	Eligibility criteria : – The project cannot receive double funding; – The budget for the Walloon partners should follow the SPW-EER (DGO6) cost model; – The funding rate will be the maximum allowed by the decree of 3 July 2008, modified; – The beneficiary must have a stable financial situation; A financial viability check has to be carried out before being recommended for a full proposal. – The beneficiary must have Operational offices in the Walloon Region; – The project must add benefit to the regional economy; – All information needed for evaluation should be available; – A Walloon complementary funding request's form must be submitted to the SPW-TLPE (DGO4) for full proposal within five working days after the call deadline

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Wallonia eligible scope for projects by the Regional Funding Organisation**

Country/funding programme (s): Wallonie

	Subsurface heat and cold sources			Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems			
	Deep Geothermal*	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
Technology and Concepts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smart Integration and control	-	-	-	o	X	o	X	-	X	X	X	X	X	X	X	o	o	o	o
Urban and regional planning	-	-	-	o	X	o	X	-	X	X	X	X	X	X	X	o	o	o	o
Environmental sustainability	-	-	-	o	X	o	X	-	X	X	X	X	X	X	X	o	o	o	o
Markets and regulations	-	-	-	o	X	o	X	-	X	X	X	X	X	X	X	o	o	o	o
Stakeholder adoption and engagement	-	-	-	o	X	o	X	-	X	X	X	X	X	X	X	X	X	X	X

**Table C Wallonia | Clarification on the eligible scope for funding**

Technology and Concepts	N/A
Smart Integration and control	N/A
Urban and regional planning	N/A
Environmental sustainability	N/A
Markets and regulations	N/A
Stakeholder adoption and engagement	N/A

## 10.3 Denmark Energy Technology Development and Demonstration Programme EUDP

**Table A EUDP Danish National Funding Agency rules**

Country/Region	
Funding organisation	Energy Technology Development and Demonstration Programme (EUDP). EUDP is administrated by an independent board with a secretariat within the Danish Energy Agency. Niels Bohrs Vej 8D 6700 Esbjerg Denmark
National contact person	Mette Jessen Schultz <a href="mailto:mjsc@ens.dk">mjsc@ens.dk</a> +45 33926799
National funding commitment	Up to 3.000.000 EUR.
Maximum funding per awarded project	Support must be in accordance with European state aid rules and the <a href="#">EUDP rules</a> (see <a href="#">here</a> for English version).
Funding programme	Energy Technology Development and Demonstration Programme (EUDP).
Organisations eligible for funding	<ul style="list-style-type: none"> <li>- Public and private enterprises</li> <li>- Research organizations, knowledge institutes (incl. approved technological service institutes).</li> </ul> <p>However, it is emphasized that the projects <b>are industrially driven</b> (by Danish companies) to ensure the <b>commercial relevance</b>, as well as <b>bringing the technology to the market</b>.</p> <p>Support must be in accordance with European state aid rules and the <a href="#">EUDP rules</a> (see <a href="#">here</a> for English version).</p>
Eligible cost and funding rates	<p>Danish applicants must comply with the EUDP rules which can be found in the link below (section 3): <a href="#">Danish version</a> / <a href="#">English version</a></p> <p>It is not possible to receive funding for activities, which aim to:</p> <ul style="list-style-type: none"> <li>- Activities within TRL 9, which aim to develop business models, market analyses, sales promotion and other commercial market activities, including distributing existing technology or involving commercial operation of facilities, etc.</li> <li>- Expand infrastructure.</li> <li>- Carry out pre-production planning or streamlining production or control processes, etc.</li> </ul>
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	The EUDP primarily provides funding for development and demonstration of new energy technology, but it can support projects that also include a minor research element. These must, however, prepare or directly support development and demonstration in the same project, and concrete plans for this must have been drawn up.
TRL levels which can be funded	EUDP primarily supports projects within TRL 4-8*. *EUDP can support research activities that feed directly into development and demonstration activities.
Submission of the proposal at the national level	The independent EUDP board must approve a national application, which will be evaluated nationally as an individual independent EUDP project, meaning the full application to ERA-Net will not be included in the evaluation process. The national application must follow the required criteria and rules set by EUDP. The national application forms including further information must be submitted through the application portal of EUDP. All relevant information will be available at EUDP's homepage (see link below).
Submission of financial and progress reports at the national level	The projects need to follow the national rules for submission of financial and progress reports described in the <a href="#">EUDP rules</a> (see <a href="#">here</a> for English version).
Information available at	English: <a href="https://energiteknologi.dk/en/soeg-tilskud">https://energiteknologi.dk/en/soeg-tilskud</a> Danish: <a href="https://energiteknologi.dk/soeg-tilskud">https://energiteknologi.dk/soeg-tilskud</a>
Other	We highly recommend contacting the national contact point during the preparation of the project.

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B EUDP eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): EUDP

	Subsurface heat and cold sources			Above ground heat and cold sources			Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems				
	Deep Geothermal *	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
Technology and Concepts	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Smart Integration and control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Urban and regional planning																			
Environmental sustainability																			
Markets and regulations																			
Stakeholder adoption and engagement																			

**Table C EUDP | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>
For more information, please find the call text and the strategy at EUDP's <a href="#">homepage</a> .
<b>Smart Integration and control</b>
For more information, please find the call text and the strategy at EUDP's <a href="#">homepage</a> .
<b>Urban and regional planning</b>
N/A
<b>Environmental sustainability</b>
N/A
<b>Markets and regulations</b>
N/A
<b>Stakeholder adoption and engagement</b>
N/A

## 10.4 Denmark Innovation Fund Denmark

**Table A Innovation Fund Danish National Funding Agency rules**

<b>Country/Region</b>	
<b>Funding organisation</b>	Innovation Fund Denmark Europaplads 2, 4. Sal 8000 Aarhus C, Denmark
<b>National contact person</b>	Sune Dalgaard Ebbesen <a href="mailto:sune.dalgaard.ebbesen@innofond.dk">sune.dalgaard.ebbesen@innofond.dk</a> +45 6190 5030 Jens Peter Vittrup <a href="mailto:jens.peter.vittrup@innofond.dk">jens.peter.vittrup@innofond.dk</a> +45 6190 5023
<b>National funding commitment</b>	1.000.000 Euro
<b>Maximum funding per awarded project</b>	Maximum funding budget for a Danish partner is € 300,000. If two or more Danish partners participate in a project, the maximum funding budget is € 500,000.
<b>Funding programme</b>	International programmes
<b>Organisations eligible for funding</b>	IFD can fund both Universities, GTS institutes, Hospitals, Public Organizations and Enterprises.
<b>Eligible cost and funding rates</b>	Eligible cost-categories for Danish partners: Salary, Travel, Subcontracting, Materials, Communication and knowledge sharing and Other expenses (overhead).
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Industrial Research/Experimental Development
<b>TRL levels which can be funded</b>	TRL 3-9
<b>Submission of the proposal at the national level</b>	Danish applicants must, no later than two weeks after the deadline for submission, register individually in the national e-grant system.
<b>Submission of financial and progress reports at the national level</b>	National Progress Reports must be submitted by the Danish partners to IFD every 6 (six) months.
<b>Information available at</b>	<a href="https://innovationsfonden.dk/sites/default/files/2018-10/general-terms-and-conditions-for-international-projects-approved-after-1-feb-2018.pdf">https://innovationsfonden.dk/sites/default/files/2018-10/general-terms-and-conditions-for-international-projects-approved-after-1-feb-2018.pdf</a> or/and <a href="https://innovationsfonden.dk/en">https://innovationsfonden.dk/en</a>
<b>Other</b>	IFD only funds projects which include a Danish user-organisation or commercial partner Applications. Danish Universities and other research organisations are also invited to participate.

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Innovation Fund eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Innoation Fund

	Subsurface heat and cold sources			Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system					End-use systems			
	Deep Geothermal *	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other	
Technology and Concepts	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Smart Integration and control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Urban and regional planning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Environmental sustainability	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Markets and regulations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Stakeholder adoption and engagement	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

**Table C InnovationFund | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>
Projects with a significant societal or commercial impact should be prioritised
<b>Smart Integration and control</b>
Projects with a significant societal or commercial impact should be prioritised
<b>Urban and regional planning</b>
Projects with a significant societal or commercial impact should be prioritised
<b>Environmental sustainability</b>
Projects with a significant societal or commercial impact should be prioritised
<b>Markets and regulations</b>
Projects with a significant societal or commercial impact should be prioritised
<b>Stakeholder adoption and engagement</b>
Projects with a significant societal or commercial impact should be prioritised

## 10.5 Germany German Federal Ministry for Economic Affairs and Energy BMWi

**Table A German National Funding Agency rules**

Country/Region	
Funding organisation	Project Management Jülich Forschungszentrum Jülich GmbH D-52425 Jülich
National contact person	<b>Solarthermal:</b> Kerstin Krüger (k.krueger@fz-juelich.de, +49 30 20199 530) <b>CSP:</b> Dr. Tarik Schwarzer (t.schwarzer@fz-juelich.de, +49 246161 9157) <b>Geothermal:</b> Dr. Stephan Schreiber (k.schreiber@fz-juelich.de, +49 2461 61 4743)
National funding commitment	<b>Solarthermal:</b> approx. €1.0 million <b>CSP:</b> approx. €1.0 million <b>Geothermal:</b> approx. € 2.5 million
Maximum funding per awarded project	Only limited by available funding commitment from Germany (per topic).
Funding programme	7th Energy Research Programme of the Federal Government "Innovations for the Energy Transition." (see <a href="https://www.bmwi.de/Redaktion/EN/Publikationen/Energie/7th-energy-research-programme-of-the-federal-government.pdf?__blob=publicationFile&amp;v=5">https://www.bmwi.de/Redaktion/EN/Publikationen/Energie/7th-energy-research-programme-of-the-federal-government.pdf?__blob=publicationFile&amp;v=5</a> , (English)) with the corresponding announcement for funding (see <a href="https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html">https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html</a> , (German))  For detailed information, visit: <a href="https://www.ptj.de">https://www.ptj.de</a> (English available)
Organisations eligible for funding	Companies located in Germany, Universities and Research Institutions. For details see: <a href="https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html">https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html</a> , Chapter V.4.(German)
Eligible cost and funding rates	Depending on the status of applicant and TRL (in general for applied research: Industry: up to 50%, University and Research Institutions: up to 100%), for details see: <a href="https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html">https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html</a> , Chapter V.6, (German)
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Industrial Research, Experimental Development, Demonstration (Funding rates dependent on project plan)
TRL levels which can be funded	Applied Research TRL 3-9
Submission of the proposal at the national level	German partners must submit their national partner application in German via easy-Online ( <a href="https://foerderportal.bund.de/easyonline/">https://foerderportal.bund.de/easyonline/</a> , (German)) into the national electronic submission system. This applies to both the pre-proposal ("Skizze") and the full proposal. The same deadlines apply for the national level submission as for the European level submission.
Submission of financial and progress reports at the national level	Yes, scientific and financial reporting according to national criteria.
Information available at	Solarthermal: <a href="https://www.ptj.de/projektfoerderung/angewandte-energieforschung/gebäude-quartiere">https://www.ptj.de/projektfoerderung/angewandte-energieforschung/gebäude-quartiere</a> (German) CSP: <a href="https://www.ptj.de/projektfoerderung/angewandte-energieforschung/thermische-kraftwerke">https://www.ptj.de/projektfoerderung/angewandte-energieforschung/thermische-kraftwerke</a> (German) Geothermal: <a href="https://www.ptj.de/projektfoerderung/angewandte-energieforschung/geothermie">https://www.ptj.de/projektfoerderung/angewandte-energieforschung/geothermie</a> (German)
Other	We highly recommend contacting the topic-specific NCP for information on the specific requirements prior to and during the preparation of the project.



### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B German eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Germany /BMW

	Subsurface heat and cold sources			Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems			
	Deep Geothermal*	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
Technology and Concepts	X	X		X				X	X	o				X	o	o	o	o	
Smart Integration and control	o	o		o				o	o					o					
Urban and regional planning	o	o		o				o	o					o					
Environmental sustainability	o	o		o				o	o					o					
Markets and regulations																			
Stakeholder adoption and engagement	o	o		o				o	o					o					

**Table C Germany | Clarification on the eligible scope for funding**

Technology and Concepts
<p><b>Geothermal:</b></p> <p>Projects addressing the heat supply from geothermal resources of all depth ranges and in particular addressing the following topics in the whole development cycle of a geothermal installation using technological innovations:</p> <ul style="list-style-type: none"> <li>• Risk reduction &amp; secure exploitation and operation of geothermal installations</li> <li>• Cost reduction</li> <li>• Demo/Pilot projects</li> <li>• Technology development</li> <li>• Subsurface heat/cold storage solutions</li> <li>• Collection of geological data related to geothermal use</li> <li>• Secondary &amp; hybrid uses (incl. e.g. mineral extraction from geothermal brines)</li> </ul> <p>For details, see: <a href="https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html">https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html</a>, Chapter II.3.8, (German) and discuss your idea with the NCP for geothermal.</p>

**Solar thermal:**

Projects addressing the heat supply from solar thermal resources and in particular addressing the following topics:

- Technology development (to improve economic efficiency)
- Development of Building Integrated Solar Thermal (BIST), PVT systems.
- Integration of large Solar Thermal systems in District Heating and Cooling (DHC) networks
- Solar heat integration in industrial processes
- New applications like Agro-Solar Thermal

For details, see: <https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html>, Chapter I.3.1, (German) and discuss your idea with the NCP for Buildings and Districts.

**Concentrated solar power (CSP):**

Projects addressing the heat supply from concentrated solar power resources and in particular addressing the following topics:

- Demo/Pilot projects
- Technology development (to improve economic efficiency)
- Large scale thermal storages
- Solar heat integration (high-temperature heat)

For details, see: <https://www.bmwi.de/Redaktion/DE/Downloads/B/bekanntmachung-forschungsfoerderung-im-7-energieforschungsprogramm.html>, Chapter II.3.10, (German) and discuss your idea with the NCP for geothermal.

**Smart Integration and control**

Geothermal/Solar thermal/ Concentrated solar power:

Might be included in a project addressing topics in the section "Technology and Concepts". Please contact the NCP.

**Urban and regional planning**

Geothermal/Solar thermal/ Concentrated solar power:

Might be included in a project addressing topics in the section "Technology and Concepts". Please contact the NCP.

**Environmental sustainability**

Geothermal/Solar thermal/ Concentrated solar power:

Might be included in a project addressing topics in the section "Technology and Concepts". Please contact the NCP.

**Markets and regulations**

N/A

**Stakeholder adoption and engagement**

Geothermal/Solar thermal/ Concentrated solar power:

Might be included in a project addressing topics in the section "Technology and Concepts". Please contact the NCP.

## 10.6 Hungary National Research, Development and Innovation Office (NKFIH)

**Table A Hungarian National Funding Agency rules**

Country/Region	
Funding organisation	National Research, Development and Innovation Office (NKFIH)
National contact person	Orsolya Küttel, <a href="mailto:orsolya.kuttel@nkfi.gov.hu">orsolya.kuttel@nkfi.gov.hu</a>
National funding commitment	200 000 €
Maximum funding per awarded project	100 000 €
Funding programme	Call for Proposals: Support of Hungarian organisations successfully participating in joint international ERA-NET COFUND and EJP COFUND programmes ( <i>Pályázat az ERA-NET COFUND és EJP COFUND programok közös nemzetközi pályázati felhívásaiban sikeresen szereplő magyar szervezetek támogatására</i> )
Organisations eligible for funding	Institution of higher education, Other budgetary research institution, Enterprise-based research organisation, Enterprise (non-research type), Non-profit research organisation
Eligible cost and funding rates	Personal costs Purchase costs (equipment) Other goods, works and services, coordination costs
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Fundamental research, Industrial research, Experimental development, Protection of industrial property rights, Market entry
TRL levels which can be funded	N/A
Submission of the proposal at the national level	YES
Submission of financial and progress reports at the national level	YES
Information available at	<a href="https://nkfi.gov.hu/english/nrdi-fund/support-of-hungarian-organisations-participating-in-joint-international-programmes-2019-217-era-net/call-for-project-proposals-2019-217-era-net">https://nkfi.gov.hu/english/nrdi-fund/support-of-hungarian-organisations-participating-in-joint-international-programmes-2019-217-era-net/call-for-project-proposals-2019-217-era-net</a>
Other	N/A

**Explanation of the symbols in the "Eligible scope" – matrix, Table B**

- ✓ **X:** This can be the **main objective** of a project
- ✓ **o:** This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]:** This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Hungarian eligible scope for projects by the National Funding Organisation**  
Country/funding programme (s): Hungary

	Subsurface heat and cold sources			Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system					End-use systems			
	Deep Geothermal*	Shallow Geothermal	Other	Solar	Waste heat or cold		Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
Technology and Concepts	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Smart Integration and control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Urban and regional planning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Environmental sustainability	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Markets and regulations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stakeholder adoption and engagement	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Table C Hungary | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	No limitations within the above scope, the call is open for all subtopics.
<b>Smart Integration and control</b>	No limitations within the above scope, the call is open for all subtopics.
<b>Urban and regional planning</b>	No limitations within the above scope, the call is open for all subtopics.
<b>Environmental sustainability</b>	No limitations within the above scope, the call is open for all subtopics.
<b>Markets and regulations</b>	No limitations within the above scope, the call is open for all subtopics.
<b>Stakeholder adoption and engagement</b>	No limitations within the above scope, the call is open for all subtopics.

## 10.7 Iceland Icelandic Research Institute, RANNIS

**Table A Icelandic National Funding Agency rules**

<b>Country/Region</b>	
<b>Funding organisation</b>	The Icelandic Centre for Research – Rannis <a href="https://www.rannis.is">https://www.rannis.is</a>
<b>National contact person</b>	Svandís Unnur Sigurðardóttir <a href="mailto:svandis.u.sigurdardottir@rannis.is">svandis.u.sigurdardottir@rannis.is</a> Sigurður Björnsson <a href="mailto:sigurdur.bjornsson@rannis.is">sigurdur.bjornsson@rannis.is</a> Rannis +354 515 5800
<b>National funding commitment</b>	500.000 EUR
<b>Maximum funding per awarded project</b>	Contact NCP. Conversion rate of EUR to ISK will be based on the rate on the submission deadline date.
<b>Funding programme</b>	The Technology Development Fund
<b>Organisations eligible for funding</b>	Institutions/Companies
<b>Eligible cost and funding rates</b>	Ref. Hagnyt rannsóknarverkefni – <a href="https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/hagnyt-rannsoknarverkefni">https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/hagnyt-rannsoknarverkefni</a> - with the exception that companies can lead the project as Main Applicant
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Industrial Research/ Experimental Development/Demonstration
<b>TRL levels which can be funded</b>	TRL 5+
<b>Submission of the proposal at the national level</b>	No
<b>Submission of financial and progress reports at the national level</b>	No
<b>Information available at</b>	<a href="https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/">https://www.rannis.is/sjodir/rannsoknir/taeknithrounarsjodur/</a> Rannis +354 515 5800 <a href="mailto:svandis.u.sigurdardottir@rannis.is">svandis.u.sigurdardottir@rannis.is</a> or <a href="mailto:sigurdur.bjornsson@rannis.is">sigurdur.bjornsson@rannis.is</a>
<b>Other</b>	Applicants should contact the NCP prior to submitting an application. An industrial partner is recommended.

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Icelandic eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Iceland / RANNIS

	Subsurface heat and cold sources				Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems				
	Deep Geothermal *	Shallow Geothermal	Other		Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other	
Technology and Concepts	X	o	o		X	X			X	X				X	X			X	X	X	o
Smart Integration and control	X		o		X	o			X	X				X	X			X	X	X	o
Urban and regional planning	o		o		o	o			o	o				X	o			X	X	o	
Environmental sustainability	o	o	o		o	o			o	o				X	o			X	X	X	
Markets and regulations	o				o									X	o						
Stakeholder adoption and engagement	o				o	o			o	o								o	o	o	

**Table C Iceland | Clarification on the eligible scope for funding**

Technology and Concepts	N/A
Smart Integration and control	N/A
Urban and regional planning	N/A
Environmental sustainability	N/A
Markets and regulations	N/A
Stakeholder adoption and engagement	N/A

## 10.8 Ireland      Geological Survey Ireland, GSI

**Table A Irish, GSI National Funding Agency rules**

<b>Country/Region</b>	
<b>Funding organisation</b>	Geological Survey Ireland Beggars Bush, Haddington Rd, Dublin 4, Ireland
<b>National contact person</b>	Aoife Braiden, aoife.braiden@gsi.ie +353 1 6782650
<b>National funding commitment</b>	€300,000
<b>Maximum funding per awarded project</b>	€300,000
<b>Funding programme</b>	GSI Research Programme
<b>Organisations eligible for funding</b>	Academic Institutes, SMEs/Industry (For all others please contact NPC to check eligibility)
<b>Eligible cost and funding rates</b>	100% eligible for research activities 80% for demonstration and experimental development All funding must be in line with State Aid (it is the responsibility of the beneficiary to ensure compliance)  Examples of eligible costs: Personnel costs, travel, consumables, subcontracting (professional services only), indirect costs max 20% of direct costs excluding subcontracting  Examples of ineligible costs: Maintenance contracts, durable equipment; office expenses  Budgets should be submitted to NCP in advance to confirm eligible/ineligible costs. All costs must be clearly justified.
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Fundamental Research / Industrial Research / Experimental Development / Demonstration
<b>TRL levels which can be funded</b>	1-7
<b>Submission of the proposal at the national level</b>	NCP must be contacted at least two weeks prior to submission to ensure budget, topic and beneficiary eligibility. All projects must be in line with GSI's remit and scientific area of interest. GSI will establish a panel of experts to assess Stage 1 submissions at a national level. This panel will select proposals to continue to Stage 2. For details please contact NCP.
<b>Submission of financial and progress reports at the national level</b>	National activity and financial reports must be submitted as per contract
<b>Information available at</b>	www.gsi.ie/research    aoife.braiden@gsi.ie
<b>Other</b>	N/A

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEO THERMICA thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Ireland, GSI, eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Ireland / GSI

	Subsurface heat and cold sources			Above ground heat and cold sources			Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems				
	Deep Geothermal *	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
Technology and Concepts	X	X	X					X											
Smart Integration and control																			
Urban and regional planning	o	o	o					o											
Environmental sustainability	o	o	o					o											
Markets and regulations																			
Stakeholder adoption and engagement	X	X	X					X											

**Table C Ireland GSI | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	NCP must be contacted to confirm your topic is eligible prior to submission.
<b>Smart Integration and control</b>	N/A
<b>Urban and regional planning</b>	NCP must be contacted to confirm your topic is eligible prior to submission. Projects including planning and management of the subsurface are of particular interest.
<b>Environmental sustainability</b>	NCP must be contacted to confirm your topic is eligible prior to submission.
<b>Markets and regulations</b>	N/A
<b>Stakeholder adoption and engagement</b>	NCP must be contacted to confirm your topic is eligible prior to submission.



## 10.9 Ireland Sustainable Energy Authority of Ireland, SEAI

Table A Irish, SEAI National Funding Agency rules

Country/Region	
Funding organisation	Sustainable Energy Authority of Ireland (SEAI)
National contact person	Lucy Corcoran Lucy.Corcoran@seai.ie
National funding commitment	€500,000
Maximum funding per awarded project	€200,000
Funding programme	The SEAI National Energy Research, Development & Demonstration (RD&D) Funding Programme.
Organisations eligible for funding	<p>Public and private sector organisations based in the Republic of Ireland (including Irish subsidiaries of overseas companies) who wish to carry out projects in Ireland. Applications will be accepted from Private Enterprises; Universities, Institutes of Technology and State Funded Research Organisations; Public Sector Bodies and Semi-State Bodies, who are based in the Republic of Ireland.</p> <p>It is strongly recommended that interested applicants contact the SEAI national contact person in the early stages of project proposal preparation.</p>
Eligible cost and funding rates	<p>Eligible costs are those actual, necessary and economic costs that are incurred during the grant duration.</p> <p>Only costs directly associated with delivery of a project are considered eligible costs.</p> <p>Please review the <a href="#">SEAI RD&amp;D Budget Policy</a> for further guidance on budgetary policies and financial requirements associated with the SEAI National Energy RD&amp;D Funding Programme, including further guidance in relation to eligible costs and funding rates.</p>
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Applicants should refer to the <a href="#">SEAI RD&amp;D Budget Policy</a> for guidance on eligible research categories and funding rates (Page 8-9).
TRL levels which can be funded	Applicants should refer to the <a href="#">SEAI RD&amp;D Budget Policy</a> and to the <a href="#">SEAI website</a> for further details of SEAI's remit and SEAI research funding programmes objectives and eligibility guidelines.
Submission of the proposal at the national level	Separate national application required. Please contact the SEAI national contact person for further details on the national application process.
Submission of financial and progress reports at the national level	Biannual financial and progress reports are required. Please contact the SEAI national contact person for further details.
Information available at	<p>SEAI National Energy Research Development and Demonstration (RD&amp;D) Funding Programme: <a href="https://www.seai.ie/grants/research-funding/research-development-and-demonstration-fund/">https://www.seai.ie/grants/research-funding/research-development-and-demonstration-fund/</a></p> <p>SEAI RD&amp;D Budget Policy document: <a href="https://www.seai.ie/grants/research-funding/research-development-and-demonstration-fund/SEAI-RDD-Budget-Policy.pdf">https://www.seai.ie/grants/research-funding/research-development-and-demonstration-fund/SEAI-RDD-Budget-Policy.pdf</a></p>
Other	N/A

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOTHERMICA thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Irish, SEAI, eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Ireland / SEAI

Projects that align with SEAI’s remit and the overarching objectives of the SEAI National Energy RD&D Funding Programme are eligible to apply. The eligible scope for projects could include the areas listed in Table B below. Applicants should refer to the SEAI website and the following link for an overview of the programme objectives: <https://www.seai.ie/grants/research-funding/research-development-and-demonstration-fund/>

	Subsurface heat and cold sources	Above ground heat and cold sources	Thermal storage (TES)	Networks and conversion, Integration in the energy system	End-use systems
	Deep Geothermal* Shallow Geothermal Other	Solar Waste heat or cold Biomass Other	Underground TES Large-scale TES Building-scale TES Other	Heat pumps Distribution systems Integration Other	Space heating and/or cooling Domestic hot water Ventilation Other
Technology and Concepts	X	X	X	X	X
Smart Integration and control	X	X	X	X	X
Urban and regional planning	X	X	X	X	X
Environmental sustainability	X	X	X	X	X
Markets and regulations	X	X	X	X	X
Stakeholder adoption and engagement	X	X	X	X	X

**Table C Ireland SEAI | Clarification on the eligible scope for funding**

Technology and Concepts	N/A
Smart Integration and control	N/A
Urban and regional planning	N/A
Environmental sustainability	N/A
Markets and regulations	N/A
Stakeholder adoption and engagement	N/A

## 10.10 Israel Ministry of Energy Chief Scientist Office, MoE-IL

**Table A Israel National Funding Agency rules**

Country/Region	
Funding organisation	Ministry of Energy, Israel 7 Bank Israel St., POB 36148, Jerusalem 9136002
National contact person	Olga Zlatkin; <a href="mailto:olgaz@energy.gov.il">olgaz@energy.gov.il</a> ; +972-74-7681910
National funding commitment	600 000 euro overall
Maximum funding per awarded project	375,000 Euro for "Pilot&Demonstration programme" (see below); 190,000 Euro for "Start-Up" and "Academia" programmes
Funding programme	MoE funding programmes: "Academia" (Applicative research, TRL 2-4) "Start-up" (TRL 4-6) "Pilot&Demonstration" (TRL 5-8)
Organisations eligible for funding	Research institutes for "Academia"; companies and municipalities for "Start-Up" and "Pilot&Demonstration."
Eligible cost and funding rates	Eligible costs are for salaries, equipment, materials and subcontractors. Funding rates are 100% for "Academia", 62.5% for "Start-up", and 50% for "Pilot&Demonstration"
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Industrial (+applicative) Research / Experimental Development / DEMOnstration (pilots)
TRL levels which can be funded	2-8
Submission of the proposal at the national level	yes
Submission of financial and progress reports at the national level	yes
Information available at	<a href="https://www.gov.il/he/departments/guides/rd_grants">https://www.gov.il/he/departments/guides/rd_grants</a> (Hebrew) <a href="https://www.gov.il/BlobFolder/guide/rd_chief_science/he/RD-booklet-2020-WEB.pdf">https://www.gov.il/BlobFolder/guide/rd_chief_science/he/RD-booklet-2020-WEB.pdf</a> (English)
Other	At the national level, projects can start ca. November 2022.

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEO THERMICA thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Israel eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Israel

	Subsurface heat and cold sources			Above ground heat and cold sources			Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems				
	Deep Geothermal *	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
Technology and Concepts	X	X	X <sup>1</sup>	X	X		X <sup>1</sup>	X <sup>2</sup>	X <sup>2</sup>	X	o	X	o	X <sup>3</sup>	o	X <sup>4</sup>	o	o	o
Smart Integration and control	X	X	X	X	X		X <sup>1</sup>	X <sup>2</sup>	X <sup>2</sup>	X	o	X	o	X <sup>3</sup>	o	X <sup>4</sup>	o	o	o
Urban and regional planning	o	X	X	X	o		X <sup>1</sup>	X <sup>2</sup>	X <sup>2</sup>	X	o	X	o	o	o	X <sup>4</sup>	o	o	o
Environmental sustainability	X	X	X	X	X		X	X	X			X	o	X <sup>3</sup>	o	X <sup>4</sup>	o	o	o
Markets and regulations	o	o	o	o	o		o	o	o			o	o	o	o	o	o	o	o
Stakeholder adoption and engagement	X	X	X	X	X		X	X	X	X		X	o	X	X	X <sup>4</sup>	o	o	o

**Table C Israel | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	Our main interest is in cooling technologies. Notes: (1) including cold aquifers, groundwater and seawater reservoirs; (2) especially long term, seasonal storage; (3) including cooling for nuclear power plants; (4) especially cooling/ air conditioning.
<b>Smart Integration and control</b>	Including integration in nuclear power plants
<b>Urban and regional planning</b>	N/A
<b>Environmental sustainability</b>	N/A
<b>Markets and regulations</b>	N/A
<b>Stakeholder adoption and engagement</b>	N/A

## 10.11 Netherlands Netherlands Enterprise Agency, RVO

**Table A Dutch National Funding Agency rules**

Country/Region	
<b>Funding organisation</b>	Ministerie van Economische Zaken Acting through: Rijksdienst voor Ondernemend Nederland (RVO) (Netherlands Enterprise Agency) Slachthuisstraat 71   6041 CB   Roermond   The Netherlands
<b>National contact person</b>	Paul Ramsak <a href="mailto:paul.ramsak@rvo.nl">paul.ramsak@rvo.nl</a> +31 8 8602 2275 Gerdi Breembroek <a href="mailto:gerdi.breembroek@rvo.nl">gerdi.breembroek@rvo.nl</a> +31 6 5256 4480
<b>National funding commitment</b>	8 million Euro
<b>Maximum funding per awarded project</b>	Maximum funding per project is limited by the funding instrument. Please consult with the national contact person on the budget to be requested.
<b>Funding programme</b>	Funding from the Netherlands can be through the following Dutch national regulation Topsector Energie instruments – § 4.2.3 Hernieuwbare Energietransitie (HER+) § 4.2.10 Demonstratie energie- en klimaatinnovatie (DEI+) Maximum percentages of support are specified in the regulation and in accordance with the general block exemption regulation; please consult the relevant page through <a href="http://wetten.overheid.nl/BWBR0035474">http://wetten.overheid.nl/BWBR0035474</a> (par. 4.2.3 or 4.2.10). Please note that HER+ should be used for projects that result in cost reduction of technologies within SDE++ (see terms and conditions of DEI+). Consult with the national contacts to get a quick check of your project idea or draft proposal.
<b>Organisations eligible for funding</b>	At least one company should be collaborating in the consortium. Municipalities and provinces are not eligible. Consult the national regulation.
<b>Eligible cost and funding rates</b>	Definitions according to the guidelines laid down in the General Block Exemption Regulation ( <a href="#">GBER</a> ), HER+: Articles 25, 38, 41, see guidance document (Dutch) DEI+: Articles 25, 36, 38, 41, 46, 56, see <a href="#">guidance document</a> (Dutch) The HER+ and DEI+ regulations have their own requirements and conditions. In order to be eligible for one of these schemes, you have to meet the specific requirements of the scheme.
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	HER+: Demonstration / Experimental development / Industrial research DEI+: Demonstration / Experimental development (in particular pilot projects) For demonstration funding, please note that the investments should be designed to remedy or prevent damage to physical surroundings or natural resources by a <u>beneficiary's own activities</u> , to reduce the risk of such damage or to lead to more efficient use of natural resources, including energy-saving measures and the use of renewable sources of energy
<b>TRL levels which can be funded</b>	HER+: TRL 6-8 should be the main focus; limited TRL 4-5 work. DEI+ TRL 6/7-9. Projects should lead to commercial implementation before 2030.
<b>Submission of the proposal at the national level</b>	HER+ with the <u>pre-proposal</u> , you need to submit a " <a href="#">projectideeformulier</a> " and the "Onderbouwing Hernieuwbare Energieprojecten" to the national contact persons at RVO max. two days after the international deadline for preproposals. Please highlight how the international project objectives contribute to the aim of HER+ and the role and activities of the Dutch partners in the project. For the "Onderbouwing Hernieuwbare Energieprojecten", you will find instructions on this page: <a href="https://mijn.rvo.nl/tse-hernieuwbare-energietransitie">https://mijn.rvo.nl/tse-hernieuwbare-energietransitie</a> , go to "bijlagen bij uw aanvraag". Please make sure that you use the 2021 version and fill out both calculation models. Include an explanation of your assumptions. Send your information to the national contacts mentioned above. With the <u>full proposal</u> , you need to submit your HER+ project to RVO through RVO's

	<p>electronic submission system, at latest within 2 working days after the deadline of the GEOthermica/JPP SES call, specifying the Dutch funding request and submitting a full (national) proposal, with a full national project plan plus again the “Onderbouwing Hernieuwbare Energieprojecten”. Please note that “E-herkenning niveau 3” is required. Please consult your national contacts for specific instructions.</p> <p><u>DEI+</u> with the <u>pre-proposal</u>, you need to submit a “<u>projectideeformulier</u>” to the national contact persons at RVO max. two days after the international deadline for preproposals. Please highlight how the international project objectives contribute to the aim of DEI+ and the role and activities of the Dutch partners in the project.</p> <p>For the <u>full proposal</u>, if you use DEI+, you need to submit your national proposal <b>before 7 January 2022</b>, 17:00 uur, unless instructed otherwise by the National contact persons for this call. For the national proposal, see <a href="https://mijn.rvo.nl/tse-demonstratie-energie-en-klimaatinnovatie-dei">https://mijn.rvo.nl/tse-demonstratie-energie-en-klimaatinnovatie-dei</a>. You will need to present a full national proposal with budget sheets and a national project plan. Please note that “E-herkenning niveau 3” is required. Please consult your national contacts for specific instructions.</p>
<b>Submission of financial and progress reports at the national level</b>	Yes, annual progress reports as per standard procedure for HER+ and DEI+.
<b>Information available at</b>	<p><a href="http://www.rvo.nl/tse">www.rvo.nl/tse</a> - select the relevant funding scheme. Please read the “Handleiding” carefully for HER+  <a href="https://www.rvo.nl/subsidie-en-financieringswijzer/hernieuwbare-energietransitie">https://www.rvo.nl/subsidie-en-financieringswijzer/hernieuwbare-energietransitie</a>          Handleiding: <a href="https://www.rvo.nl/sites/default/files/2021/03/Handleiding-subsidie-Hernieuwbare-energietransitie-2021-HER.pdf">https://www.rvo.nl/sites/default/files/2021/03/Handleiding-subsidie-Hernieuwbare-energietransitie-2021-HER.pdf</a>          for DEI+  <a href="https://www.rvo.nl/subsidie-en-financieringswijzer/demonstratie-energie-en-klimaatinnovatie-dei">https://www.rvo.nl/subsidie-en-financieringswijzer/demonstratie-energie-en-klimaatinnovatie-dei</a>          Handleiding:  <a href="https://www.rvo.nl/sites/default/files/2021/02/71966-RVO-DEI-Handleiding-DR085-TG.pdf">https://www.rvo.nl/sites/default/files/2021/02/71966-RVO-DEI-Handleiding-DR085-TG.pdf</a></p>
<b>Other</b>	<p>It is strongly recommended to contact the national contact points to discuss the pre-proposal as well as full-proposal before submission.</p> <p>This annex must be regarded as a guide. The information contained herein is not complete. For specific details and conditions, you should always consult the original regulation texts, manuals and websites.</p>

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table Dutch eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Netherlands / RVO

	Subsurface heat and cold sources				Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems						
	Deep Geothermal *	Shallow Geothermal	Other		Solar	Waste heat or cold	Biomass	Other		Underground TES	Large-scale TES	Building-scale TES	Other		Heat pumps	Distribution systems	Integration	Other		Space heating and/or cooling	Domestic hot water	Ventilation	Other
Technology and Concepts	X	X	X		X	X		X		X	X	X	X		X	X	X	X		0	0	0	0
Smart Integration and control	0	0	0		0	0		0		0	0	0	0		0	0	0	0		0	0	0	0
Urban and regional planning																							
Environmental sustainability																							
Markets and regulations																							
Stakeholder adoption and engagement																							

**Table C Netherlands | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	Projects should support the objectives and fit the requirements of the national instruments: HER+: Innovation for CO2 emissions reduction, that help save expenses for the SDE++ scheme before 2030. The SDE++ scheme is the extended feed-in premium scheme in Netherlands, covering amongst others geothermal, thermal energy from water, waste heat, industrial heat pumps, all in specific categories. DEI+: Support for pilot- and demonstration projects, that contribute to cost-effective reduction of CO2 emissions in the Netherlands in 2030. Demonstration projects should be innovative at national level (or 2nd or 3rd of a kind) while pilot projects should be innovative at the global level.
<b>Smart Integration and control</b>	Projects should support the objectives and fit the requirements of the national instruments as stated above. Smart integration and control can be part of eligible cost.
<b>Urban and regional planning</b>	Public acceptability, environmental sustainability, planning issues and markets and regulations are important aspects to consider in a well-defined proposal for demonstrations, pilots and innovation efforts. However, the associated cost is generally not eligible in the participating funding schemes DEI+ and HER+.
<b>Environmental sustainability</b>	See "Urban and regional planning"
<b>Markets and regulations</b>	See "Urban and regional planning"
<b>Stakeholder adoption and engagement</b>	See "Urban and regional planning"

## 10.12 Norway The Research Council of Norway, RCN

**Table A Norwegian National Funding Agency rules**

Country/Region	
Funding organisation	The Research Council of Norway
National contact person	Per Arne Karlsen, E-mail: pak@rcn.no Tel: +47 917 27 669 Mari L. Authen, E-mail: mlau@rcn.no Tel +47 454 66 328
National funding commitment	10 mill NOK (~1,0 mill Euro.)
Maximum funding per awarded project	Only limited by available funding commitment from Norway The maximum funding rate must be according to <a href="#">State Aid Guidelines</a> as described on the RCN website <a href="http://www.forskningsradet.no">www.forskningsradet.no</a>
Funding programme	ENERGIX programme.
Organisations eligible for funding	Approved research organisations and Industry.
Eligible cost and funding rates	<p>For detailed information, visit <a href="#">Project budgets</a>. Furthermore, <a href="#">State Aid Guidelines</a> must be followed. The applicants should specify their type of project (Fundamental research, Industrial research or Experimental development) as a whole and on WP-level. All Norwegian sub-projects must meet all requirements and eligibility criteria related to one of the two following project schemes defined by RCN. Please make a clear statement in the application describing which one of the two project schemes are selected for your Norwegian sub-project.</p> <p><u>1. Knowledge-building Projects for Industry</u> Project proposals must include research organisations performing the project with financial support from industrial partners. Applications must meet requirements and eligibility criteria as specified <a href="#">here</a>. Project proposals must include industrial partners or general public users that are financing at least 20 percent of the total Norwegian budget. The contribution from industry must, in general, be cash, not in-kind. Only the research organisations are eligible for funding from RCN.</p> <p><u>2. Innovation projects for the industrial sector</u> The applicant must be a company, preferably in cooperation with research organisations. Applications must meet requirements as specified on the <a href="#">RCN web</a>.</p> <p>The funding rate will be according to the state aid guidelines. For example, Industrial Research can be funded by 50 percent, with possibilities of higher funding rates if certain criteria are fulfilled (see link above). For further questions regarding the RCN project schemes, please contact the national contact persons.</p>
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMONstration</i>	Fundamental research/Industrial research/Experimental development. The applicants should specify their type of project.
TRL levels which can be funded	TRL 1-5/6
Submission of the proposal at the national level	No required additional submission at national level in Norway. However, the application submitted at international level must have a clear specification of budget and financing plan for the Norwegian sub-project. Budget and financing plan must be broken down with details for all Norwegian partners.
Submission of financial and progress reports at the national level	Scientific and financial reporting is required, following the standard national procedures at the Research Council of Norway
Information available at	<a href="#">Project follow-up and reporting</a>



<b>Other</b>	We strongly recommend contacting the national contact point during the preparation of the project. Norwegian partners in a project will face the same conditions as in <a href="#">the ENERGIX programme</a> , and all budgeting for Norwegian partners will have to comply with requirements in the ENERGIX programme. The Norwegian parts of applications submitted have to comply with the <a href="#">ENERGIX programme plan</a> (only available in Norwegian). In addition, the application must be relevant according to the <a href="#">ENERGI 21 strategy</a> .
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**Explanation of the symbols in the "Eligible scope" – matrix, Table B**

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOTHERMICA thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Norwegian eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): RCN/ ENERGIX

	Subsurface heat and cold sources				Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems							
	Deep Geothermal	Shallow Geothermal	Other		Solar	Waste heat or cold	Biomass	Other		Underground TFS	Large-scale TES	Building-scale TES	Other		Heat pumps	Distribution systems	Integration	Other		Space heating	Domestic hot water	Ventilation	Other	
<b>Technology and Concepts</b>	X	X			X	X	X			X	X	X			X	X	X							
<b>Smart Integration and control</b>	o	o			o	o	o			o	o	o			o	o								
Urban and regional planning	o	o			o	o	o			o	o	o			o	o	o							
Environmental sustainability	o	o			o	o	o																	
Markets and regulations																								
Stakeholder adoption and engagement																								

**Table C Norwegian | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	This can be the main objective of a project. Please contact the national contact persons for clarification before applying
<b>Smart Integration and control</b>	This can be a secondary objective of the project but not the main objective. Please contact the national contact persons for clarification before applying
<b>Urban and regional planning</b>	This could be a secondary objective of the projects, but not the main objective.
<b>Environmental sustainability</b>	This can be a secondary objective of the project but not the main objective
<b>Markets and regulations</b>	This aspect can only be an insignificant part of the eligible cost
<b>Stakeholder adoption and engagement</b>	This aspect can only be an insignificant part of the eligible cost

## 10.13 Scotland Scottish Enterprise, SE

**Table A Scottish National Funding Agency rules**

<b>Country/Region</b>	
<b>Funding organisation</b>	Scottish Enterprise
<b>National contact person</b>	Karen Fraser ( <a href="mailto:karen.fraser@scotent.co.uk">karen.fraser@scotent.co.uk</a> ) Kate Henderson ( <a href="mailto:kate.henderson@scotent.co.uk">kate.henderson@scotent.co.uk</a> )
<b>National funding commitment</b>	€1,150,000 (£1,000,000)
<b>Maximum funding per awarded project</b>	No maximum
<b>Funding programme</b>	ERA-Net Heating and Cooling Joint Challenge Call
<b>Organisations eligible for funding</b>	Companies in Scotland. Universities / research organisations (in a consortium led by a company, having at least two companies, with at least one of these being Scottish-based and undertaking R&D in Scotland, limit of one Scottish research organisation per project).
<b>Eligible cost and funding rates</b>	Project-specific costs including salaries, overheads, equipment, sub-contracting, consultancy, training, materials, trials, IP management (SMEs only), travel and subsistence, and audit certificates for financial claims (SMEs only). Intervention rate up to 50% of eligible costs for SMEs and 40% of eligible costs for large companies. Universities can be funded up to 100% for non-commercial activities; if the IP is to be commercialised by the University large company rates would apply. Details available on request.
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Grant finding. Industrial research/experimental development.
<b>TRL levels which can be funded</b>	5-8
<b>Submission of the proposal at the national level</b>	Yes, at Full Proposal stage. Further information will be provided to applicants invited to Stage 2.
<b>Submission of financial and progress reports at the national level</b>	Yes
<b>Information available at</b>	From contact persons listed above.
<b>Other</b>	Please speak to Scottish Enterprise contact prior to submitting proposal to discuss the project scope. Projects should include the development of new products, processes or services for Scottish companies.

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEO THERMICA thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Scottish eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Scotland/ Scottish Enterprise

	Subsurface heat and cold sources				Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems							
	Deep Geothermal *	Shallow Geothermal	Other		Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other		Heat pumps	Distribution systems	Integration	Other		Space heating and/or cooling	Domestic hot water	Ventilation	Other		
Technology and Concepts	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Smart Integration and control	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Urban and regional planning																								
Environmental sustainability			o					o				o				o								o
Markets and regulations			o					o				o				o								o
Stakeholder adoption and engagement				o				o				o				o								o

**Table C Scotland | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>
Please speak to Scottish Enterprise contact prior to submitting proposal
<b>Smart Integration and control</b>
Please speak to Scottish Enterprise contact prior to submitting proposal
<b>Urban and regional planning</b>
Please speak to Scottish Enterprise contact prior to submitting proposal
<b>Environmental sustainability</b>
Please speak to Scottish Enterprise contact prior to submitting proposal
<b>Markets and regulations</b>
Please speak to Scottish Enterprise contact prior to submitting proposal
<b>Stakeholder adoption and engagement</b>
Please speak to Scottish Enterprise contact prior to submitting proposal

## 10.14 Sweden Swedish Energy Agency, SWEA

Table A Swedish National Funding Agency rules

Country/Region																					
Funding organisation	Swedish Energy Agency																				
National contact person	<a href="mailto:Sofia.andersson@energimyndigheten.se">Sofia.andersson@energimyndigheten.se</a> <a href="mailto:Emina.pasic@energimyndigheten.se">Emina.pasic@energimyndigheten.se</a> <a href="mailto:Fredrik.lundstrom@energimyndigheten.se">Fredrik.lundstrom@energimyndigheten.se</a>																				
National funding commitment	2.0 MEUR																				
Maximum funding per awarded project	no																				
Funding programme	Swedish Research & Innovation Programs																				
Organisations eligible for funding	<p>All actors operating in Sweden are eligible for funding. For example, public research organisations/institutions, cities/municipalities and the civil sector can receive grants as well as large, medium sized and small enterprises.</p> <p>Decisions on funding research, development and innovation in the energy area are taken according to the ordinance SFS 2008:761 in the Swedish Code of Statues.</p> <p><a href="#">Förordning (2008:761) om statligt stöd till forskning och utveckling samt innovation inom energiområdet Svensk författningssamling 2008:2008:761 t.o.m. SFS 2018:1036 - Riksdagen.</a></p>																				
Eligible cost and funding rates	<p>Personnel costs, travel costs, consultancy, material costs, laboratory costs, equipment costs, patent, indirect costs (only academia and research institutes).</p> <p><a href="http://www.energimyndigheten.se/globalassets/utlysningar/anvisningar-foransokan.pdf">http://www.energimyndigheten.se/globalassets/utlysningar/anvisningar-foransokan.pdf</a></p> <p>The Swedish Energy Agency welcome projects related to all the topics described in the call text. For information regarding eligible costs and SWEA's legislation <b>see the Swedish national call text</b> via the following link: <a href="http://www.energimyndigheten.se/utlysningar/">http://www.energimyndigheten.se/utlysningar/</a></p> <p>The proportion of a company's level of support is determined partly based on which research category the various activities in the project are deemed to correspond to and partly based on the size of the company in receipt of the support.</p> <p>Table 1. Overview of <b>maximum level of support</b> - the actual rate of funding will be decided case by case.</p> <table border="1"> <thead> <tr> <th>Type of research and development</th> <th>Non-economic actors*</th> <th>Small company<sup>14</sup></th> <th>Medium company</th> <th>Big company</th> </tr> </thead> <tbody> <tr> <td>Fundamental research</td> <td>100 %</td> <td>100 %</td> <td>100 %</td> <td>100 %</td> </tr> <tr> <td>Industrial research</td> <td>100 %</td> <td>70 %</td> <td>60 %</td> <td>50 %</td> </tr> <tr> <td>Experimental development</td> <td>100 %</td> <td>45 %</td> <td>35 %</td> <td>25 %</td> </tr> </tbody> </table> <p>*) For example universities, university colleges, research institutes and cities/municipalities (excluding their economic entities).</p> <p><b>National criteria</b></p> <p>Research projects:</p> <ul style="list-style-type: none"> <li>o Up to 100% of the eligible project costs can be financed for <b>research projects</b>. See Table 1.</li> </ul> <p>Innovation projects:</p> <ul style="list-style-type: none"> <li>o Co-financing rate for <b>innovation projects</b> should be at least 50% of the total project costs. See Table 1.</li> </ul>	Type of research and development	Non-economic actors*	Small company <sup>14</sup>	Medium company	Big company	Fundamental research	100 %	100 %	100 %	100 %	Industrial research	100 %	70 %	60 %	50 %	Experimental development	100 %	45 %	35 %	25 %
Type of research and development	Non-economic actors*	Small company <sup>14</sup>	Medium company	Big company																	
Fundamental research	100 %	100 %	100 %	100 %																	
Industrial research	100 %	70 %	60 %	50 %																	
Experimental development	100 %	45 %	35 %	25 %																	

[1] The commissions directive (EU) nr 651/2014, Appendix 1, Article 2.

Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Fundamental Research / Industrial Research / Innovation /Experimental Development
TRL levels which can be funded	TRL 2-8
Submission of the proposal at the national level	Yes
Submission of financial and progress reports at the national level	Yes
Information available at	<a href="http://www.energimyndigheten.se/utlysningar/">http://www.energimyndigheten.se/utlysningar/</a>
Other	<p>The Swedish funding agencies fund research and innovation projects that support system transformation into a modern and sustainable, fossil-free welfare society – applying our credibility, a comprehensive approach and courage.</p> <p><b>Submission of the proposal at the national level:</b> Following the full proposal stage of the international Expert Panel evaluation, the Swedish Principal Investigators in the projects recommended for funding will be invited to submit a national application to SWEA (via E-kanalen). Information about the submission will be provided in the invitation and by the contact person.</p> <p><b>Submission of financial and progress reports at the national level:</b> Following the national project decision: the funded projects will be required to submit one financial and one progress report annually to SWEA (via E-kanalen).</p>

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X:** This can be the **main objective** of a project
- ✓ **o:** This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]:** This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Swedish eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Sweden, Swedish Energy Agency

	Subsurface heat and cold sources				Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems						
	Deep Geothermal *	Shallow Geothermal	Other		Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other		Heat pumps	Distribution systems	Integration	Other		Space heating and/or cooling	Domestic hot water	Ventilation	Other	
Technology and Concepts	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	
Smart Integration and control	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	
Urban and regional planning	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	
Environmental sustainability	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	
Markets and regulations	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	
Stakeholder adoption and engagement	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	

**Table C Sweden| Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>
Specified in national call text
<b>Smart Integration and control</b>
Specified in national call text
<b>Urban and regional planning</b>
Specified in national call text
<b>Environmental sustainability</b>
Specified in national call text
<b>Markets and regulations</b>
Specified in national call text
<b>Stakeholder adoption and engagement</b>
Specified in national call text

## 10.15 Switzerland Swiss Federal Office of Energy DETEC – SFOE

**Table A Swiss National Funding Agency rules**

<b>Country/Region</b>	
<b>Funding organisation</b>	Swiss Federal Office of Energy SFOE
<b>National contact person</b>	For technical issues: <b>Céline Weber</b> Tel: + 41 22 367 1763 <a href="mailto:cweber@focus-e.ch">cweber@focus-e.ch</a> For administrative issues: <b>Men Wirz</b> Tel: +41 58 462 5597 <a href="mailto:men.wirz@bfe.admin.ch">men.wirz@bfe.admin.ch</a>
<b>National funding commitment</b>	- CHF 150'000.-- (approximately €140'000) for projects with low TRL (1-3) in geoenery only - CHF 3'500'000.-- (approximately €3'200'000) for projects with TRL (4-9) - Open budget for innovative projects that are executed in conjunction with heat and power projects that are funded via Switzerland's geothermal energy subsidy programs.
<b>Maximum funding per awarded project</b>	All projects selected are subject to the limitations imposed by specific rules. Contact the National Contact Point.
<b>Funding programme</b>	Programme names: - TRL 1-3: Energy Research - TRL 4-9: Pilot-, Demonstration- and Flagship Program - Innovation: Switzerland's geothermal energy subsidy programs where innovation is integrated in commercial power or heat projects
<b>Organisations eligible for funding</b>	Public (incl. education) and private organizations
<b>Eligible cost and funding rates</b>	Research programme (TRL 1-3): All costs excluding material costs, in-kind and third contributions are expected. Pilot and demonstration programme (TRL 4-9): All costs directly associated with the implementation of the project, 40% of the non-amortisable supplementary costs (see <a href="#">Appendix II of the P+D-programme directive</a> for details). Geothermal energy subsidy program (Energy Act, CO <sub>2</sub> Act): Contact the SFOE.
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Applied Research/ Industrial Research / Experimental Development / Demonstration
<b>TRL levels which can be funded</b>	1-9
<b>Submission of the proposal at the national level</b>	Yes. Owing to a number of legal requirements, Swiss applicants must submit, simultaneously with "Accelerating the Heating and Cooling Transition" pre-proposals, the full proposal that seeks funding for Swiss applicants. Get in touch with your National Contact Point.
<b>Submission of financial and progress reports at the national level</b>	Yes, scientific and financial reporting according to program rules.
<b>Information available at</b>	Additional information is available at: <ul style="list-style-type: none"> <li>• Research programme (TRL 1-3): <a href="https://www.bfe.admin.ch/bfe/fr/home/recherche-et-cleantech/programmes-de-recherche/geoenergie.html">https://www.bfe.admin.ch/bfe/fr/home/recherche-et-cleantech/programmes-de-recherche/geoenergie.html</a></li> <li>• Pilot and demonstration programme (TRL 4-9): <a href="https://www.bfe.admin.ch/bfe/fr/home/recherche-et-cleantech/programme-pilote-et-de-demonstration.html">https://www.bfe.admin.ch/bfe/fr/home/recherche-et-cleantech/programme-pilote-et-de-demonstration.html</a></li> <li>• Geothermal energy subsidy program: <a href="https://www.fedlex.admin.ch/eli/cc/2017/763/fr">https://www.fedlex.admin.ch/eli/cc/2017/763/fr</a> (in French) or <a href="https://www.fedlex.admin.ch/eli/cc/2017/763/de">https://www.fedlex.admin.ch/eli/cc/2017/763/de</a> (in German)</li> <li>• <a href="https://www.fedlex.admin.ch/eli/cc/2012/856/fr#annex_12/iv_d1817e334">https://www.fedlex.admin.ch/eli/cc/2012/856/fr#annex_12/iv_d1817e334</a> (in French) or</li> <li>• <a href="https://www.fedlex.admin.ch/eli/cc/2012/856/de#annex_12/iv_d1817e334">https://www.fedlex.admin.ch/eli/cc/2012/856/de#annex_12/iv_d1817e334</a> (in German)</li> </ul>

<b>Other</b>	Applicants must establish contact with the National Contact Point (NCP) no later than 1 July 2021. For more information regarding the geothermal subsidy programs: please contact the SFOE directly
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**Explanation of the symbols in the "Eligible scope" – matrix, Table B**

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Swiss eligible scope for projects by the National Funding Organisation**

Country/funding programme (s): Switzerland / SFOE

	Subsurface heat and cold sources			Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems			
	Deep Geothermal*	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
<b>Technology and Concepts</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Smart Integration and control</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Urban and regional planning	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Environmental sustainability	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Markets and regulations																			
Stakeholder adoption and engagement																			

**Table C Swiss | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	For low TRLs (1-3), only pure geothermal energy related projects can be funded.
<b>Smart Integration and control</b>	For low TRLs (1-3), only pure geothermal energy related projects can be funded.
<b>Urban and regional planning</b>	For low TRLs (1-3), only pure geothermal energy related projects can be funded.
<b>Environmental sustainability</b>	For low TRLs (1-3), only pure geothermal energy related projects can be funded.
<b>Markets and regulations</b>	N/A
<b>Stakeholder adoption and engagement</b>	N/A



## 10.16 Turkey      The Scientific and Technological Research Council of Turkey TÜBİTAK

**Table A Turkish National Funding Agency rules**

Country/Region	
Funding organisation	The Scientific and Technological Research Council of Turkey -
National contact person	M. Kaan KARAÖZ <a href="mailto:kaan.karaoz@tubitak.gov.tr">kaan.karaoz@tubitak.gov.tr</a> , +903122989466 Önder ZOR <a href="mailto:onder.zor@tubitak.gov.tr">onder.zor@tubitak.gov.tr</a> , +903122989456
National funding commitment	750.000-EUR
Maximum funding per awarded project	To be announced on TÜBİTAK website <a href="http://www.tubitak.gov.tr">www.tubitak.gov.tr</a>
Funding programme	1071Programme
Organisations eligible for funding	Universities, public and private organisations.
Eligible cost and funding rates	SMEs can receive funds as 75% of all eligible R&D costs and large companies receive funds as 60 % of all eligible R&D costs.  Higher education institutions, their institutes and R&D centres can receive funds as 100% of all eligible R&D costs.
Type of funding <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Fundamental Research / Industrial Research / Experimental Development / DEMOnstration
TRL levels which can be funded	1-8
Submission of the proposal at the national level	Yes. Details to be announced on TÜBİTAK website <a href="http://www.tubitak.gov.tr">www.tubitak.gov.tr</a>
Submission of financial and progress reports at the national level	Yes. Details to be announced on TÜBİTAK website <a href="http://www.tubitak.gov.tr">www.tubitak.gov.tr</a>
Information available at	<a href="http://www.tubitak.gov.tr">www.tubitak.gov.tr</a>
Other	N/A

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X**: This can be the **main objective** of a project
- ✓ **o**: This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]**: This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B Turkish eligible scope for projects by the National Funding Organisation**  
**Country/funding programme (s): Turkish / 1071 Program**

	Subsurface heat and cold sources			Above ground heat and cold sources				Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems			
	Deep Geothermal*	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
<b>Technology and Concepts</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Smart Integration and control</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Urban and regional planning	X	X	-	X	o	X	-	X	o	o	-	o	o	o	-	o	X	o	-
Environmental sustainability	o	X	-	X	o	X	-	X	o	X	-	X	o	o	-	X	X	X	-
Markets and regulations	o	X	-	X	X	X	-	o	o	X	-	X	o	o	-	X	o	o	-
Stakeholder adoption and engagement	o	o	-	X	X	X	-	o	o	X	-	X	o	o	-	X	o	o	-

**Table C Turkey | Clarification on the eligible scope for funding**

Technology and Concepts	N/A
Smart Integration and control	N/A
Urban and regional planning	N/A
Environmental sustainability	N/A
Markets and regulations	N/A
Stakeholder adoption and engagement	N/A

## 10.17 USA Department of Energy, DOE

**Table A USA National Funding Agency rules**

<b>Country/Region</b>	
<b>Funding organisation</b>	United States Department of Energy Geothermal Technologies Office
<b>National contact person</b>	Lauren Boyd lauren.boyd@ee.doe.gov
<b>National funding commitment</b>	Maximum of \$4,000,000 USD, equivalent to approximately 3,200,000 €
<b>Maximum funding per awarded project</b>	\$1,000,000 USD
<b>Funding programme</b>	N/A
<b>Organisations eligible for funding</b>	Only U.S. National Laboratories are eligible to participate as prime applicants. Partnerships with U.S. industry or academic institutions are allowable.
<b>Eligible cost and funding rates</b>	Limited to costs for support of U.S. research and personnel
<b>Type of funding</b> <i>Please use: Fundamental Research / Industrial Research / Experimental Development / DEMOnstration</i>	Projects focused on Fundamental Research, Experimental Development, Demonstration are permitted for heating and cooling as well as power production (Hydrothermal and enhanced geothermal systems).
<b>TRL levels which can be funded</b>	TRL 2-6
<b>Submission of the proposal at the national level</b>	Applicants are required to submit a pre-proposal to NCP (National Contact Person) prior to the submission date to ensure alignment with DOE-GTO goals and priorities. All proposals are subject to US DOE leadership review and approval.
<b>Submission of financial and progress reports at the national level</b>	Technical and financial reporting according to standard DOE policies relevant to the U.S. National Laboratories will be required in addition to those required by Geothermica program rules.
<b>Information available at</b>	N/A
<b>Other</b>	Please schedule a meeting with the NCP prior to submission.

### Explanation of the symbols in the "Eligible scope" – matrix, Table B

- ✓ **X:** This can be the **main objective** of a project
- ✓ **o:** This can be a **secondary objective** of the project but not the main objective (typically requiring less than 1/3 of the project effort)
- ✓ **[no symbol]:** This aspect can only be an insignificant part of the eligible cost (<5%)

\* Deep Geothermal can include: Identification and assessment of geothermal resources, Geothermal resource development (drilling, completion, materials and equipment), Operations and Supply and smart integration into the energy system. For more info: GEOthermica thematic concept: <http://www.geothermica.eu/about-geothermica/>

**Table B American eligible scope for projects by the National Funding Organisation**  
**Country/funding programme (s): USA**

	Subsurface heat and cold sources			Above ground heat and cold sources			Thermal storage (TES)				Networks and conversion, Integration in the energy system				End-use systems				
	Deep Geothermal*	Shallow Geothermal	Other	Solar	Waste heat or cold	Biomass	Other	Underground TES	Large-scale TES	Building-scale TES	Other	Heat pumps	Distribution systems	Integration	Other	Space heating and/or cooling	Domestic hot water	Ventilation	Other
<b>Technology and Concepts</b>	X	X	X					X	X	X		X	X	X		X	X	X	
<b>Smart Integration and control</b>	X	X						X		X		X				X			
Urban and regional planning		X						X	X	X		X	X	X		X	X	X	
Environmental sustainability		X						X	X	X		X				X			
Markets and regulations																			
Stakeholder adoption and engagement	X	X						X	X	X		X	X	X		X	X	X	

**Table C USA | Clarification on the eligible scope for funding**

<b>Technology and Concepts</b>	Any research, development, and demonstration associated with geothermal direct use, heat pumps for heating and cooling purposes as well as RD&D associated with geothermal thermal energy storage, or finding, accessing (drilling), characterizing, creating, and sustaining hydrothermal and enhanced geothermal systems.
<b>Smart Integration and control</b>	Any research, development, and demonstration that integrates geothermal energy for heating and cooling and/or underground thermal energy storage with one or more additional renewable / clean energy sources and increases the efficiency, efficacy, or output of this hybrid system using novel control systems. Smart integration and control projects that focus on only geothermal heating and cooling or only underground thermal energy storage will also be considered.
<b>Urban and regional planning</b>	Research, development, and demonstration of new and novel planning systems or tools that incorporate geothermal heating and cooling systems and account for the unique considerations and benefits that geothermal energy brings to urban and regional systems, including the reliable, dispatchable nature of direct use thermal energy.
<b>Environmental sustainability</b>	Research and development or analysis of the environmental sustainability of geothermal / underground thermal energy storage systems, large-scale geothermal network and end use systems
<b>Markets and regulations</b>	Not applicable for U.S.
<b>Stakeholder adoption and engagement</b>	Projects focused on social license to operate for all types of geothermal direct use or heat pumps and power production including enhanced geothermal systems.

## Annex 2: Template for pre-proposal<sup>6</sup>

### A concise description of the project (2 - 6 pages for points 1 to 4 below)

Please give an overview of the project, including:

- a) Objectives and targets (against defined technology and market development needs)
- b) Key activities (work programme, work packages and work distribution among partners, i.e. key activities and leading roles / significant contributions of partners)
- c) Expected results (innovation or innovation potential, impact the contribution to achieving the objectives of the Joint Call GEOthermica & JPP SES significantly)
- d) Added value through transnational co-operation for the whole project

Please also provide a full project title and an acronym.

#### 1. Objectives and challenges

[Your pre-proposal text]

#### 2. Short description of your project, including key activities

[Your pre-proposal text]

#### 3. Expected results

[Your pre-proposal text]

#### 4. Relevance to heating and/or Cooling transition and trans-national added value

[Your pre-proposal text]

#### 5. Realistic Timing

[Your preliminary GANTT chart with the critical path identified]

#### 6. Approximate projected costs in EUR

[Table giving total costs and requested funding for each partner and the consortium as a whole, maximum one page, detailing also any other requested funding for the same work]

- Please use Table in Annex 4

#### 7. Short description of partners involved

[Maximum half a page per partner]

#### 8. Letters of Intent from each partner

[Maximum one page per partner]

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<sup>6</sup> See also Chapter 7 Submission and Evaluation.

One document per heading must be uploaded as an attachment in the ESS. See the published instructions on the ESS.

## Annex 3: Template for full proposal<sup>7</sup>

### 1. Publishable summary of the project (max. 1 page)

### 2. Scientific, technological and commercial objectives and challenge (max. 2 pages)

Give evidence relating to the scientific, technological and commercial objectives and challenges of the project, outlining:

- Overall aims and objectives of the projects,
- Key targets to be achieved in the project
- Technology Readiness Levels including a short justification
- Scientific, technical and commercial challenges

### 3. A technical and scientific description of the project (max. 20 pages, projects requesting more than 3 M€ may use up to 45 pages)

Describe:

- State-of-the-art
- The innovation of your approach
- Technical milestones and expected results
- Methodologies and technologies utilised to reach goals
- Recent research relevant to the project undertaken by the consortium partners
- Clear definition of the national subprojects

### 4. Outline of Work Plan (max. 10 pages, projects requesting more than 2 M€ may use up to 20 pages)

Please outline the following clearly:

- Project structure
- Individual work package description with person-months per work package and partner
- Milestones, deliverables and schedule, including Gantt chart
- Role of each partner; relevant expertise, resources, manpower, costs
- Monitoring and management of the project

### 5. Impact on and relevance to the objectives of the GEOTHERMICA & JPP SES Joint Call and transnational added value (max. 2 pages)

Please outline:

- The relevance of the project and impact on the joint call objectives of accelerating the Heating and/or Cooling Transition
- Scientific/technical/industrial/commercial expertise of the consortium partners which is relevant for the success of the project
- Value of national subprojects
- Added-value of transnational co-operation

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<sup>7</sup> See also Chapter 7 Submission and Evaluation. One document per heading must be uploaded as an attachment in the ESS. See the published instructions on the ESS [link here](#).

**6. Risks and mitigation measures (max. 2 pages)**

- *Please outline the most relevant risks (technical, economical, commercial, organisational and political), their severity, and preventive and mitigation measures for your project.*
- *Describe whether and how the project can be implemented when any partner is deemed not eligible.*

**7. Status of Consortium Agreement (max. ½ page)**

- *Give a brief outline of the consortium agreement. Include whether the Consortium Agreement is at the initial or final draft stage or is in the process of being signed. Indicate the expected date of the agreement signed.*

**8. Further information**

**a) Experience of participants (max. 2 pages per partner)**

*Brief additional profile information (CVs, relevant professional experience etc.) of all partners (principal investigators) together with lists of up to 5 recent publications, description of companies or institutions.*

**b) Main facilities, equipment (max. ½ page)**

*If applicable, a description of significant facilities and large-scale equipment available to the consortium that is necessary to fulfil the aims of the project*

**c) The table on project cost and requested funding**

*This Table should give total costs and requested funding for each partner and the consortium as a whole. Any non-personnel line item of more than €50.000 requires an explanation. Also, additional (expected) sources of funding should be specified.*

*Please use the Table in Annex 4 for budgeting*

**d) Other further information (max. 2 pages)**

*Additional information relating to the project to be added here, e.g. technical drawings, diagrams, charts etc.*

**e) Letters of Commitments (LoC) from each partner**

*Should express the partner's role and contribution in-cash and in-kind in the project.*

## Annex 4: Table for budgeting

Use template which can be downloaded from the GEOthermica and JPP SES websites:

Support documents <http://www.geothermica.eu/joint-call-2021/>



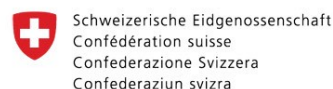
# Call Text and Guideline for Applicants

## Accelerating the Heating and Cooling Transition

### Joint Call 2021 GEOTHERMICA & JPP Smart Energy Systems



Funding provided by



The Energy Technology  
Development and  
Demonstration Programme

