

Community Geothermal Heating and Cooling Design and Deployment

PCFO IGAP Grant Snapshot

August 4, 2022

<u>Agency:</u> US Department of Energy (DOE)	<u>Bureau:</u> Geothermal Technologies Office
<u>Application Deadline:</u> October 11, 2022	<u>Max Award:</u> \$750,000 (Budget Period 1); \$10 million (Budget Period 2)

Description

The Community Geothermal Heating and Cooling Design and Deployment Funding Opportunity Announcement (FOA) will fund projects that help communities design and deploy geothermal district heating and cooling systems, create related workforce training, and identify and address environmental justice concerns. The overall FOA objective is to support the formation of U.S. community coalitions that will develop community geothermal systems that supply at least 25% of the overall community heating or heating and cooling demand in communities where current fuel use results in increased greenhouse gas emissions. An overarching goal is to support community coalitions seeking to deploy geothermal systems that can reduce the disproportionate shares of energy costs and environmental impacts to underserved populations in a diverse set of communities.

Eligible Recipients

1. Individuals: US citizens and permanent residents
2. Domestic Entities: For-profit entities, educational institutions, and nonprofits
3. State government entities
4. Local governments entities
5. Tribal governments entities
6. DOE/National Nuclear Security Administration (NNSA) Federally funded research and development centers (FFRDCs) are eligible to apply for funding as a prime recipient or subrecipient.
 - a. Non-DOE/NNSA FFRDCs are eligible to participate as a subrecipient, but are not eligible to apply as a prime recipient.
7. Federal agencies and instrumentalities: Eligible to apply as a subrecipient, but not a prime recipient

Matching Grant Requirements

- Budget Period 1: No matching grant requirement
- Budget Period 2: 10% matching grant requirement

Eligible Projects

The objective of this program is to support the formation of U.S. community coalitions that will develop, design, and install community geothermal heating and cooling systems that supply at least 25% of the overall community heating or heating and cooling demand in communities where current fuel use to heat or heat and cool homes and/or businesses results in increased greenhouse gas emissions.

Proposed community-scale and community-driven activities must address the following goals:

1. Deploy new or retrofitted geothermal, or geothermal-hybrid, district heating and cooling systems in U.S. districts, neighborhoods, and communities
2. Identify solutions for environmental justice conditions, such as cumulative environmental pollution and other hazards; underserved and disadvantaged communities; and community members who have historically experienced vulnerability due to climate change impacts
3. Assist U.S. communities to develop career and technical education and workforce transition initiatives to design, install, inspect, operate, and maintain new energy systems such as geothermal heating and cooling
4. Develop U.S. case studies about projects, including technical and economic data, to illustrate how projects can be replicated by communities throughout the United States
5. Publish data and information about U.S. geothermal district heating and cooling system deployment to demonstrate the success of such systems in a range of environments and geographies

All projects funded under this FOA will be eligible to receive funds during the first 12 months of work for Budget Period 1, "Planning and Design". Following a down-selection process at the end of Budget Period 1, some coalitions will move to the deployment stage and receive funding under Budget Period 2, "Deployment".

Coalitions should apply under one of the geographic topic areas:

1. Rural Communities
2. Remote/Island/Islanded Communities
3. Urban/Suburban Communities

New or Existing Program

New program

Tips for Being Competitive

Competitive applicants will demonstrate a strong approach to the additional FOA objectives:

- Supporting U.S. communities by reducing energy costs brought on by fossil fuel dependence
- Increasing U.S. community energy system resilience for secure and reliable heating and cooling
- Reducing environmental pollutants
- Supporting U.S. communities in developing a strategy to train and employ community members in system design and trades necessary to build, operate, and maintain community geothermal systems.

Labor Requirements

Competitive teams should engage workforce team members. Examples include private companies, trade schools, universities, Minority-Serving Institutions (MSIs) and other institutions with expertise in heating, ventilation, and air conditioning (HVAC) or energy system development; local unions with relevant technical expertise; non-profits with experience in energy system workforce programs.

Examples of Prior Award Recipients N/A

Agency Contact CommunityGeo@ee.doe.gov

Upcoming Webinars and Information Sessions

- [August 10, 2022 at 3:00PM ET](#): EERE FOA Webinar - Community Geothermal Heating and Cooling Design and Deployment
- [August 22, 2022 at 2:00PM ET](#): EERE FOA Webinar - Community Geothermal Heating and Cooling Design and Deployment

Types of Partners Required

Target applicants are anticipated to be U.S. community coalitions that include representatives for each of the four roles described below:

1. **Community team member(s)** who understands and can communicate the energy, environmental, economic, social, and/or other relevant needs that the proposed system would address, as well as local development and regulatory requirements.
2. **Workforce team member(s)** who know the community labor market and are capable of helping the coalition with apprenticeship opportunities, job placement, and developing training or lesson plans for the applicable trades.
3. **Analysis/Design team member(s)** who have experience designing geothermal systems as well as analyzing the economic and technical aspects of such systems.
4. **Deployment team member(s)** who have experience building new or retrofitting existing energy systems.

To assist coalition formation, GTO is providing a [Teaming Partner List](#) where interested parties can provide contact information and their expertise, which can be used by potential applicants or entities interested in partnering with other applicants for this FOA. The list will be updated at least biweekly until the close of the full application period, to reflect new teaming partners who have provided their information.

Total Allocation \$13 million

Anticipated Award Date Expected Timeframe for Award Negotiations: Spring 2023

Links to Grant Opportunity

- [Funding Opportunity Announcement on EERE Exchange](#)
- [Grant Opportunity on Grants.gov](#)
- [Community Geothermal Grant Program Page](#)
- [Teaming Partner List](#)