



Request for Proposal (RFP)

Project Title: Geothermal Driller Training Program Development Partnership

Issuing Organization: Sustainable Westchester

Westchester Geothermal Driller Training Program Partners

- State University of New York (SUNY)
- Westchester County Office of Economic Development
- International Ground Source Heat Pump Association (IGSHPA)
- NY GEO
- Brightcore Energy
- Dandelion
- International Union of Operating Engineers (IUOE)

1. Introduction:

Sustainable Westchester, in collaboration with SUNY, Westchester County Office of Economic Development, NY-GEO, IGSHPA, Brightcore Energy, Dandelion, and the IUOE, seeks proposals from geothermal drill rig manufacturers to partner in the development of a comprehensive Geothermal Driller Training Program. This program aims to establish a standardized training curriculum for geothermal drillers and technicians, facilitating the adoption of geothermal energy systems across New York State and the Northeast region through the Geothermal Market Capacity Coalition (ASIP Local 150, Building Decarbonization Coalition, Climate Control Group, Dandelion Energy, CT DEEP, Empire State Water Well Driller's Association, Enertech Global, Eversource Energy, Framingham State University, Geothermal Exchange Organization, GTD, Global Drilling Suppliers, Inc, HEET, Hudson Valley Community College, International Ground Source Heat Pump Association, Local 478, Massachusetts Association of Community Colleges, National Grid, National Ground Water Association, New England Gas Workers Alliance, New York for Clean Power, New York Geothermal Energy Organization, New York State Energy Research and Development Authority (NYSERDA), Ogden Wells, Skillings & Sons, Sustainable Westchester, The Developed Well Group, Venture Drilling Supply (VDS), WaterFurnace). Sustainable Westchester has stoked significant market demand and recently secured \$5.6M to distribute through a competitive grant process to nonprofits for geothermal and energy efficiency implementation. They are also partnered with the City of Yonkers and the City of Peekskill to develop Thermal Energy Networks (TENs). Most TENs will be connected to geothermal borefields. There are numerous geothermal and TEN projects in development across the county, and the pipeline is growing.

2. Project Overview:

The selected partner will be responsible for providing a geothermal drill rig and components, collaborating on curriculum development, hosting apprentices, and coordinating with local manufacturers to produce replacement parts. The primary objective is to develop a robust training program that equips participants with the necessary skills and knowledge to operate and maintain geothermal drill rigs effectively, leading to IGSHPA certification. The secondary objective is to create a self-sustaining program where certified drillers can lease a rig and use it to install community TENs. This project includes pre-apprenticeship training and deployment.

3. Scope of Work:

The partner will be expected to:

- Provide a geothermal drill rig and necessary components for training purposes.
- Collaborate with the project stakeholders on curriculum development, ensuring alignment with IGSHPA standards and best practices.
- Host apprentices for hands-on training sessions, including practical exercises and simulations.
- Ongoing support of apprentices through the program and into entering the workforce with a career development framework.

- Coordinate with local manufacturers to produce replacement parts, ensuring availability and timely delivery.

4. Project Deliverables:

- A fully operational geothermal drill rig and components for training purposes.
- Curriculum materials, including manuals, presentations, and training modules aligned with ANSI/CSA/IGSHPA 448 Design and Installation standards.
- Hosting of apprentices for practical training sessions.
- Coordination with local manufacturers for replacement parts production.

5. Technical Criteria:

Rig width < 8' 6 inches

Rig Height Travel < 10' 5 inches

Rig Height Operation <34'

Rig Weight < 54,000 lbs

Hydraulic Leveling Jacks: 4 - with 36" stroke

Table opening >11"

Top Head - Rotational (RPM) minimum 220 rpm

Top Head -Torque minimum 3800 ft/lbs

Pull Back minimum 12,000 pounds

Pull Down minimum 6,000 pounds

Mud Pump 200 gpm output minimum

Injection pump: >15 gpm

Horse Power: rig must be capable of operating all systems required for drilling or hole completions without compromising hydraulics to power functions.

Safety Features: Emergency Stop, Hands-Free Rod Handling, hands-free breakout, wireless remote control for tracking & ergonomic focused control panel.

6. Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

- Experience and expertise in manufacturing drill rigs that can be used to drill geothermal boreholes.
- Capacity to collaborate on curriculum development and training program implementation.
- Availability of resources for hosting apprentices and facilitating hands-on training.
- Ability to coordinate with local manufacturers for replacement parts production.
- Demonstrated commitment to sustainability and renewable energy initiatives.

7. Project Timeline:

- Proposal Submission Deadline: May 21st, 2024
- Partner Selection: August 30th, 2024

8. Budget:

The total budget for this project is contingent upon funding availability and will be discussed with the selected partner during contract negotiations.

9. Submission Instructions:

Interested parties must submit their proposals electronically to rachel@sustainablewestchester.org. Proposals should include a detailed description of the proposed approach, relevant experience, and any additional information deemed pertinent to the project.

10. Contact Information:

For inquiries or clarifications regarding this RFP, please contact Rachel Carpitella, Program Director, Sustainable Westchester, rachel@sustainablewestchester.org.