



STUDENT SUSTAINABILITY COMMITTEE

Funding Award and Acceptance Letter

October 21, 2018

Project: Energy Shaft for Geothermal Exchange at the UIUC Energy Farm

Dear Mx. Lin:

On behalf of the University of Illinois at Urbana-Champaign Student Sustainability Committee (SSC), I would like to thank you for considering the funds raised by the Sustainable Campus Environment Fee to implement a project that improves the sustainability of our campus. SSC is pleased to inform you that we are recommending to the Institute for Sustainability, Energy, and Environment (iSEE) that your project **receives \$10,000 in grant funding**. This fully funds all items on your proposal.

In order to remain eligible for this award, you must agree to the following conditions:

1. A final report of all work completed should be provided to the SSC Program Coordinator by January 31, 2021.
2. Project status updates and detailed account statements must be provided at the end of each semester, in the method requested, until the project is completed.
3. The Contact Person will be individually responsible for all official communication and the execution of this agreement.
4. The CFOP provided for this award shall strictly be used for the money awarded in this proposal.
5. Any substantial modifications to project scope, budget, or timeline must first be approved by SSC. These requests must be submitted in a formal letter to the Chair and Program Coordinator.
6. All projects will be expected to follow campus policies and procedures as well as any applicable State and Federal laws.
7. SSC reserves the right to revoke funding if the project does not comply with the terms and conditions outlined in this letter.
8. Any press releases or educational/promotional materials involving the project should acknowledge SSC funding.
9. Any signage involving the project or events surrounding this project should include SSC's logo and/or a statement of which fee funded the project. Projects must coordinate with SSC to ensure promotion appropriately highlights the SSC's contributions to the project.

If you agree to the terms and conditions for the funding, please sign on the designated line at the bottom of this letter. If you have any questions regarding these requirements please contact the Chair, Adrian Chendra, at chendra2@illinois.edu or the SSC Coordinator, Cathy Liebowitz, at cwl1517@illinois.edu. You will be notified when the Institute for Sustainability, Energy, and Environment and Vice Chancellor for Student Affairs officially approves this project. Again, thank you for your interest in improving the sustainability of the University of Illinois at Urbana-Champaign. We look forward to working with you in the future.



STUDENT SUSTAINABILITY COMMITTEE

SSC Signatories

Adrian Chendra, Chair
Student Sustainability Committee

Prahallad Badami, Treasurer
Student Sustainability Committee

Awardee Signatory

Zhaowang Lin
Applicant

iSEE Signatory

Dr. Evan DeLucia, Director
Institute for Sustainability, Energy & Environment

Student Affairs Signatory

Dr. Danita Brown Young
Division of Student Affairs

*Dana Mwikambwe
on behalf of Danita
Young*



STUDENT SUSTAINABILITY COMMITTEE

Project Information

Project: Energy Shaft for Geothermal Exchange at the UIUC Energy Farm (Student-Led Project)

Funding Source: Sustainable Campus Environment Fee

Funding Amount: \$10,000

Receiving Campus Unit: Department of Civil and Environmental Engineering

Unit Financial Contact: Tim Stark

E-mail: tstark@illinois.edu

Project Description:

This student-led project will involve the design, construction, and installation of an energy geo-structure for heating the UIUC Energy Farm, located near the southeast corner of Race Street and Curtis Road on the South Farms. This project has great potential in exploring and utilizing geothermal energy, a renewable energy alternative to fossil fuels. An energy shaft is a new technology designed to access the shallow geothermal energy (relatively constant ground temperature in the upper 30 m of the subsurface). The objective of the project is to determine the feasibility of using drilled shafts that are already being used to support structures on campus also as a geothermal heat-exchange element. Geothermal heat exchangers (closed absorber pipes) can be incorporated into underground infrastructure, e.g., drilled shafts, through which water is circulated to withdraw shallow geothermal heat (~55 °F) and transport it to the surface for structure heating or cooling.

This proposal directly funds:

1. Bored cast-in-place pile
2. Geothermal pipe
3. Fiber optic cable