

STUDENT SUSTAINABILITY COMMITTEE

Funding Award and Acceptance Letter

Project Leaders: Abhishek Dhoble Project Team: Michael Stablein

Project: Design, Construction and Operation of a Campus Anaerobic Digester - Feasibility Study

Re: Sustainable Campus Environment Fee - Award Recommendation

Dear Mr. Dhoble:

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 the Design, Construction and Operation of a Campus Anaerobic Digester at Sustainable Student Farm project receives \$5,500.00 in grant funding. This grant funding is awarded with the expectations that it will directly fund a feasibility study to see if the digester could function with broken-down newspaper.

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

- 1. A final report of all work completed during the feasibility study should be provided to the SSC Program Advisor by January 31, 2016.
- 2. Project status updates and detailed account statements must be provided at the end of each r semester until the project is completed.
- 3. 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 Advisor.
- 4. All projects will be expected to follow campus policies and procedures as well as any applicable State and Federal laws.
- 5. SSC reserves the right to revoke funding if the project does not comply with the terms and conditions outlined in this letter.
- 6. A copy of the results of the feasibility study must be publicly available at the conclusion of research.
- 7. Any press releases or educational/promotional materials involving the project should acknowledge SSC funding. Projects must communicate with the SSC's External Vice Chair to come up with appropriate marketing for the project.
- 8. Preliminary results of the study must be submitted to the SSC no later than April 13, 2015 for the remainder of the Fall 2014 Funding Cycle Campus Anaerobic Digest proposal to be considered for funding.
- 9. Projects must participate in the Campus Sustainability Symposium at least once before June 30, 2018.



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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, Amy Liu, at amy.linqin.liu@gmail.com or the SSC Program Advisor, Micah Kenfield, at kenfield@illinois.edu. You will be notified when the Institute for Sustainability, Energy, and Environment 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.

SSC Signatories

Amy Liu, Chair

Student Sustainability Committee

Serena Hou, Treasurer

Student Sustainability Committee

Awardee Signatory

Abhishek Dhoble

Agricultural and Biological Engineering

is EE Signatory

Dr. Evan DeLucia, Director

Institute for Sustainability, Energy, and Environment



Project Information

Project: Design, Construction and Operation of a Campus Anaerobic Digester - Pilot Study

Funding Source: Sustainable Campus Environment Fee

Funding Amount: \$5,500

Award Code: 1-303692-741000-741390

Receiving Campus Unit: Agricultural and Biological Engineering

Unit Financial Contact: Tracy Wikoff, Agricultural and Biological Engineering

E-mail: twikoff@illinois.edu Phone: (217) 244-5067

Primary Contact: Abhishek Dhoble, Agricultural and Biological Engineering

E-mail: dhoble2@illinois.edu Phone: 217-607-6995

Secondary Contact: Michael Stablein, Agricultural and Biological Engineering

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Project Description:

Food waste is the second largest category of municipal solid waste (MSW) sent to landfills in the United States, accounting for approximately 18% of the waste stream. Agricultural and garden wastes comprising of wood and yard trimmings come next in the list, accounting for approximately 15% of the waste stream. At the U of I campus as well, about 100-120 gallons of food waste is generated from one dining hall unit per week. That is roughly 0.5 cubic yards/week currently.

Anaerobic digestion occurs naturally, in the absence of oxygen, as bacteria break down organic materials and produce biogas. The process reduces the amount of material and produces biogas, which can be used as an energy source.

This technology is commonly used throughout the United States to break down sewage sludge at wastewater treatment facilities. In the past few years, there has been a movement to start adding food waste to anaerobic digesters already in place at wastewater treatment facilities.

This proposal will provide setup costs for a pilot test of an anaerobic digestion process to determine if a full-scale digester prototype is feasible.