



## STUDENT SUSTAINABILITY COMMITTEE

### Funding Application – Step II

#### Funding Criteria

##### A. General Rules

1. Students, faculty, and staff are encouraged to submit requests for funding. Student-led projects require a faculty or staff sponsor in order to have funds awarded.
2. Funding can only go to university-affiliated projects from students, faculty, staff, and departments.
3. All SSC projects must make a substantial impact on students. This may be a direct impact or an impact through education and engagement. All SSC funding is 100% from student green fees, so the projects funded by the students must benefit them.
4. SSC encourages innovation and new technologies – creative projects are encouraged to apply.
5. Unless a type of expense is specifically listed below as having restrictions, SSC can generally fund it. The items referenced below should not be taken as comprehensive list.

##### B. Things SSC Can Fund, On A Case-By-Case Basis

1. SSC can fund feasibility studies and design work; however, it must work toward ultimately addressing a sustainability need on campus.
2. SSC can fund staff positions that are related to improving campus sustainability. Strong preference will be given to proposals receiving matching funding from departments and/or plans for maintaining continuity of the position after the end of the initial grant.
3. SSC can fund outreach events with a central theme of sustainability, provided their primary audience is the general campus community.
4. SSC discourages funding requests for food and prizes but will consider proposals on a case by case basis that prove significant reasoning.
5. SSC can fund repairs and improvements to existing building systems as long as it works toward the goal of improving campus sustainability; however, a preference is shown to projects utilizing new or innovative ideas.
6. SSC can provide departments with loans for projects with a distinct payback on a case by case base. Loans will require a separate memorandum of understanding between SSC and departmental leadership pledging to repay the award in full and detailing the payback plan.

##### C. Things SSC Will Not Fund:

1. SSC will not fund projects with a primary end goal of generating revenue for non-University entities.
2. SSC will not fund personal lodging, food, beverage, and other travel expenses.
3. SSC will not fund any travel expenses.
4. SSC will not fund tuition or other forms of personal financial assistance for students beyond standard student employee wages.

**Your Step 2 funding application should include this application, the supplemental budget form, and any letters of support.**

Please submit this completed application and any relevant supporting documentation to [Sustainability-Committee@illinois.edu](mailto:Sustainability-Committee@illinois.edu). The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the Student Sustainability Committee at [sustainability-committee@illinois.edu](mailto:sustainability-committee@illinois.edu).

## General & Contact Information

**Project Name:** An Energy Savings Demonstration for Remodeling Old Structures at the ABE Farm-Phase 2

**Total Amount Requested from SSC:** 24,000

**Project Topic Areas:**  Land & Water  Education  Energy  
 Transportation  Food & Waste

**Applicant Name:** Tim Lecher

**Campus Affiliation (Unit/Department or RSO/Organization):** Agricultural & Biological Engineering

**Email Address:** tlecher@illinois.edu

### Check one:

- This project is solely my own **OR**  
 This project is proposed on behalf of (name of student org., campus dept., etc.): Agricultural & Biological Engineering Department.

### Project Team Members

Name	Department	Email
Tim Lecher	Agricultural & Biological Eng.	tlecher@illinois.edu
Rebecca Biernacki	ABE/Illini Pullers RSO	Illini.pullers@gmail.com
Nicholas Seiter	Crop Sciences	nseiter@illinois.edu
Lu-Ming Chen	Agricultural & Biological Eng.	lchen36@illinois.edu

### Student-Led Projects (Mandatory):

Name of Faculty or Staff Project Advisor:

Advisor's Email Address:

### **Financial Contact (Must be a full-time University of Illinois staff member)**

Contact Name: Ronda Sullivan

Unit/Department: Agricultural & Biological Eng.

Email Address: rsully@illinois.edu

## **Project Information**

*Please review the proposal materials and online content carefully. It is highly recommended you visit a working group meeting sometime during the proposal submission process.*

### **Please provide a brief background of the project, its goals, and the desired outcomes:**

*You may copy and paste your Step 1 application answer if nothing has changed.*

This project aims to help meet the iCAP goal of energy conservation in buildings and provide a sustainable environment for student based activities including, but not limited to RSO club meetings, research activities, hands on teaching labs, equipment development, construction and testing, and student group functions that promote student interaction and camaraderie. By replacing inefficient doors that are poorly sealed in the ABE Farm Manager/student offices and shop facility, we will help achieve the iCAP goal of becoming better stewards of the environment, while saving funds that can be used for other activities. The desired outcome is three (3) new fully insulated, sealing and operationally reliable overhead doors and operators that will assist in achieving our goals and provide for a welcoming and efficient, learning environment. Based on available data, we anticipate the cost of these upgrades will be recovered by energy savings in approximately 9 years or less after installation.

### **Where will the project be located? Are special permissions required for this project site?**

*If special permission is required for this location, please explain and submit any relevant letters of support with the application.*

**This project will take place in buildings 974 & 990. The buildings are located at the Agricultural & Biological Engineering Research Farm, 3603 South Race Street, Urbana, IL 61802. No special permissions are required. The contractor is on the approved contractor list with the University.**

### **Other than the project team, who will have a stake in the project? Please list other individuals, groups, or departments affiliated directly or indirectly by the project. This includes any entity providing funding (immediate, future, ongoing, matching, in-kind, etc.) and any entities that benefit from this project.**

*Please attach letters of commitment or support at the end of the application.*

Some of the stakeholders include: RSO teams-Illini Pullers and SAE Baja, ABE Classes-225,436, & 474, and TSM Class 372, totaling about 150 students per year, as well as multiple undergrad and graduate student lead research projects involving approximately 25-30 students, and Field Pest Entomology Program within Crop Sciences, soil and water student activities within both ABE and Crop Sciences. We also host visits from corporations, such as John Deere and AGCO, along with groups of high school students from throughout the state. Often times, the high school students have never visited a farm so we bring them into the shop and show them equipment and the student projects. We educate them on how all that food starts at the farm and ends up on the grocery store shelves. This is a meaningful and impactful perspective for students to get first hand experience, and the responses are truly amazing.

### **How will this project involve and/or benefit students?**

*This includes both direct and indirect impact.*

**The building serves numerous student teams and activities, as described in the previous statement. This combined work and learning facility enhances the student experience and serves the department, both directly and indirectly. While the building may seem like just a building, it is important to realize that the building and the ABE farm as a whole are actually part of a living and ever changing research and demonstration lab that plays a vital role in educating and developing the current and future UIUC students. Today's investment will have a great impact well into the future. Additionally, the dollars saved from reduced utility expenditures can be put towards other student-oriented activities and learning experiences.**

**How will you bring awareness and publicize the project on campus? In addition to SSC, where will information about this project be reported?**

We will work with our departmental and ACES Marketing and communications groups to assist in telling the story of what we did, why we did it, and who helped make it possible. ABE will gladly publicize and promote this project through our multiple news outlet channels such as Facebook, Twitter, Department website and ABE@Illinois newsletter. It would also be ideal to advertise the development of these facilities as a campus learning hub, where student activities focus on learning about sustainability related topics, which can also be achieved through the support of the SSC.

## **Financial Information**

*In addition to the below questions, please submit the supplemental budget spreadsheet available on the Student Sustainability Committee [website](#). Submission of both documents by the submission deadline is required for consideration of your project.*

### **Have you applied for funding from SSC before? If so, for what project?**

Yes. An Energy Savings Demonstration for Remodeling Old Structures at the ABE Farm.

### **If this project is implemented, will you require any ongoing funding required? What is the strategy for supporting the project in order to cover replacement, operation, or renewal costs?**

*Please note that SSC provides funding on a case by case basis annually and should not be considered as an ongoing source of funding.*

If implemented, this project will not require ongoing funding. If a repair is needed, it will be paid for by departmental operating funds.

### **Please include any other obtained sources of funding. Have you applied for funding elsewhere?**

*Please attach any relevant letters of support as needed in a separate document.*

This project is something we have been discussing for several years as a department. Unfortunately, without assistance from SSC this project will not be able to proceed. We have not applied for funding elsewhere.

Thanks to our multiple student champions in ABE we have chosen to again pursue funding from SSC.

## **Environmental, Economic, and Awareness Impacts**

**How will the project improve environmental sustainability at the Urbana-Champaign campus? If applicable, how does this project fit within any of the [Illinois Climate Action Plan \(iCAP\)](#) goals?**

This project relates directly to Chapter 2. Energy Conservation and Building Standards in the iCAP plan. This project will assist the University in meeting the goals set forth in the iCAP plan by replacing poorly insulated non-sealing overhead doors with new fully insulated overhead doors & weather-stripping. The doors will be properly sealed inside and out. By replacing these doors and weather stripping, we can greatly reduce the cold air outside from traveling through and around into the building which will reduce the energy (electric & natural gas) required to heat the facility.

**How will you monitor and evaluate the project's progress and environmental outcomes? What short-term and long-term environmental impacts do you expect?**

*Some examples include carbon emissions, water conservation, green behavior, and reduced landfill waste.*

**The outcomes of the project will be monitored through a review of our utility bills. We expect to reduce the natural gas usage by at least 2600 therms per year and reduce the electrical demand as well. This is like removing the pollution produced by three daily auto drivers each year, the amount of CO<sub>2</sub> produced by 1.25 homes of a family of 4, or the power required to power a CFL bulb for 122 years. The building is in good condition and will be used for decades in its improved state.**

**What are your specific outreach goals? How will this project inspire change at UIUC?**

**Outreach/Extension is a key part of the Agricultural and Biological Department and Farm. We host multiple groups throughout the year to participate in hands on learning activities, many that are directly related to sustainability. The groups that we host come from a wide range of backgrounds including inner city high school students to corporate CEO's, all of who we aim to inspire to improve their communities or operations. We feel it is vital that the University of Illinois not just tell the world about the great work being done here, but it is also paramount that we have sustainable facilities to invite and engage the world in coming to see the progress first hand. This facility has been a great resource to students, campus, visitors, and more, and maintaining this sustainability hub is sure to enrich the campus development.**

**If applicable, how does this project impact environmental injustice or social injustice?**

**This sustainability center helps to prevent environmental injustice by educating multiple stakeholders on the importance of these concepts, as well as hosting projects that directly improve sustainability in a number of areas related to Agricultural and Biological Engineering. Through our impact on the sustainability of campus, we are helping to reduce anthropomorphic climate change and its impacts on disadvantaged communities.**