

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 <u>Sustainability-Committee@Illinois.edu</u>. 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.

General & Contact Information

Project Name: Willard Airport Solar Canopy
Total Amount Requested from SSC: \$70,000
Project Topic Areas: ☐ Land & Water ☑ Education ☑ Energy ☑ Transportation ☐ Food & Waste
Applicant Name: Ryan Day
Campus Affiliation (Unit/Department or RSO/Organization): Electrical and Computer Engineering Student
Email Address: rmday2@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.): UIUC Facilities & Services
Willard Airport

Project Team Members

Name	Department	Email
Ryan Day	Student	rmday2@illinois.edu
Morgan White	Associate Director of F&S for Sustainability	mbwhite@illinois.edu
Stacey DeLorenzo	Transportation Demand Management Coordinator	sdeloren@illinois.edu
Tim Bannon	Executive Director of Willard Airport	tbannon1@illinois.edu

Student-Led Projects (Mandatory):

Name of Faculty or Staff Project Advisor: Morgan White

Advisor's Email Address: mbwhite@illinois.edu

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

Contact Name: Morgan White

Unit/Department: Facilities and Services for Sustainability

Email Address: mbwhite@illinois.edu

Project Information

Please review the proposal materials and online content carefully. It is <u>highly recommended</u> 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.

The goal of this project is to implement a solar canopy system over the Willard Airport parking lot. This would generate renewable energy for the University, reducing University-wide carbon dioxide emissions, cutting down on electricity costs, and promoting sustainability on and around campus.

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 be located over the parking lots for Willard Airport. This is with the permission of the executives at Willard Airport.

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.

The solar vendor who will be funding the construction of the system is unknown until a design is more finalized and a power purchase agreement has been made.

How will this project involve and/or benefit students?

This includes both direct and indirect impact.

This project will directly benefit the students who are working on its development by researching the budget, feasibility, and design aspects. This project also has the potential to serve as an educational tool to all students at the University. This would be the first solar canopy system on campus, and students interested in power and energy would be able to study the canopy and learn about the variety of photovoltaic systems. There are many aspects to the implementation of this project such as circuit design, panel type, inverter design, energy conversion, energy efficiency, heat island effect, and cost analysis that could all serve as educational tools for students interested in electrical engineering, civil engineering, and sustainability.

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

We hope that the project itself will serve as a wonderful reminder of sustainability in the University area. Since the solar canopy system would reside over the Willard airport parking lot, citizens of the Champaign-Urbana and Savoy community would be exposed to the development of this project. We also plan to use the student involvement in this project as a way to bring notice of the project to the student body, and into the educational environment. Information about this project will be reported on the University F&S website as well as on the iCAP portal, where many students across campus monitor the Universities progress towards reaching net carbon neutrality and other sustainability goals.

Financial Information

In addition to the below questions, please submit the supplemental budget spreadsheet available on the Student Sustainability Committee <u>website</u>. 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? No

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.

Our plan is to engage in a power purchase agreement with a solar vendor who would bear the costs of construction and maintenance over the course of the contract.

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. N/A

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?

The solar canopy system would certainly decrease the carbon emissions at UIUC and save energy. This helps the university achieve iCAP's goal of reaching carbon neutrality on campus by 2050. Based on the latest AASHE report, the University of Illinois was responsible for emitting over 347,000 Metric tons of carbon dioxide in a year. It is estimated that the energy generated by the solar canopy would equate to saving 2,500 Metric tons of carbon dioxide from being emitted annually. The solar canopy system will also reduce the heat island effect by providing shade over the parking lot.

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.

We will be able to monitor the project's process by measuring its energy output. This will show us how much clean electricity is being generated by the system, which, in turn, will give the reduced amount of carbon dioxide emissions. As soon as the system starts producing energy, the environmental impacts will begin taking place. Over the course of its life span, which can be several decades, this system will be able to save tens of thousands of tons of carbon dioxide from being emitted.

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

Our outreach goals include enhancing our community awareness about sustainability and solar technology, increasing the visibility of UIUC as an innovative institute for learning, and engage with solar partners that could serve our campus in the future. We hope that this project reaches those students who are focusing their efforts towards helping UIUC reach its iCAP goals, as well as those students who dedicate their studies towards sustainability and engineering. This solar canopy would be only one of several nationwide, and would certainly generate press and attention from universities around the country. This will inspire our students to represent our University and contribute to our environmental goals in their own ways.

If applicable, how does this project impact environmental injustice or social injustice?
By joining the community of those with solar systems and by making the effort to build a solar canopy on campus, we hope to communicate that funding these kinds of projects nationwide are important and should continue to be taken seriously. If national and municipal governments opt to supply aid and funding for these kinds of projects, areas with less financial resources will have more freedom to follow suit and build renewable energy systems of their own.