

STUDENT SUSTAINABILITY COMMITTEE

Funding Application – Small Projects (Under \$10K)

Please submit this completed application and any relevant supporting documentation by the deadline listed on the SSC website 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 <u>http://sustainability-committee@illinois.edu</u>.

General Information

Project Name: Solar Charging Stations at the Undergraduate Library

Total Amount Requested from SSC: \$7860.00

Project Topic Areas: Energy

Contact Information

Applicant Name: Alex Taylor and Luke Gasparich

Unit/Department or RSO/Organization: Energy Systems Department of Nuclear, Plasma, and Radiological Engineering

Email Address: <u>actaylo2@illinois.edu</u>, <u>gasprch2@illinois.edu</u> Phone Number: (630) 945-1537, (630) 352-7980

Project Team

Name	Department/Organization	Email	
Alex Taylor	NPRE/Energy Systems Actaylo2@illinois.edu		
Luke Gasparich	NPRE/Energy Systems	Gasprch2@illinois.edu	

Financial Contact's Name: Professor Rizwan Uddin Faculty/Unit/Department: Department of Nuclear, Plasma, and Radiological Engineering Email: rizwan@illinois.edu Phone: (217) 244-4944

(If Applicable) Facilities Manager Name: Email: Phone:

Project Information

Provide a brief background of the project, its goals, and the desired outcomes.

Provide solar powered charging stations for students' devices being used at the Undergraduate Library. Flexible solar panel chargers will be attached to the upper section Undergraduate Library on the north side of the courtyard facing south. This position will maximize efficiency due to the orientation of the sun in the northern hemisphere, which will give the north wall the most exposure to sunlight on any given day. The inclusion of solar charging stations will allow students to work knowing that they are utilizing a solar power source. This project will increase awareness of renewable power sources to new undergraduate students and inspire them to pursue new developments in renewables throughout their academic and professional careers.



How will this project improve sustainability at UIUC?

This project will reduce the electricity demand required by the Undergraduate Library by implementing renewable energy charging stations that do not rely on the grid.

Where will the project be located? Do you need special permissions to enact the project at this site? If so, please explain and attach a letter of support to your application.

Undergraduate Library. Special Permissions needed from the Head of the Undergraduate Library and Director of Library Facilities.

Other than the project team, who will have a stake in the project? Please list other individuals, groups, or departments indirectly or directly affiliated to this project. This includes any funding entities (immediate, future, ongoing, etc.) and any entities that will be benefiting from this project.

Undergraduate Library

Please indicate how this project will involve or impact students. What role will students play in the project?

Although there are already several implemented solar projects on campus, none are significantly noticeable to the students. By placing panels in a visible location like the Undergraduate Library, the students would actually be able to see and use the renewable energy source and realize the impact they are having on the environment.

Have you applied for funding with SSC previously? If so, for what project?

No

Scope, Schedule, and Budget verification

What is the plan for project implementation? Describe the key steps of the project including the start date, target completion date, target date for submitting a final report, and any significant tasks or milestones in the table below. Please be as detailed as possible.

From the time project is awarded, we estimate two to three weeks for material acquisition, two weeks for instillation of solar panels, and an additional two weeks to complete the final report. Project completion will be six to seven weeks after project is awarded.

List all budget items for which funding is being requested. Include cost and total amount for each item requested. Please be as detailed as possible.

Item	Cost Per Item	Quantity	Total Cost
Rigid Solar Panel Charger,	\$182.43	20	\$3648.60
15W			
12 Foot Extension Cord	\$9.31	20	\$186.20
Installation Cost Per Watt	\$10	300	\$3000
15% Contingency Reserve	\$1025.20	1	\$1025.20
and Shipping Costs			
Total			7860.00

Cost estimates based on McMaster Carr and the Solar Power Authority.

If the project is implemented, will there be any ongoing funding required? What is the strategy for supporting the project in order to cover replacement, operation, or renewal costs? (Note: SSC provides funding on a case by case basis and should not be considered as an ongoing source of funding)

N/A, one time instillation costs.

Please include any other sources of funding that have been obtained or applied for, and please attach any relevant letters of support.

N/A

What is the plan for publicizing the project on campus? In addition to SSC, where will information about this project get reported?

Create signs for the Undergraduate Library so that students know exactly which stations are powered by the solar panels. The visibility of the solar panels will also act as advertisement so that students know they are being utilized at the UGL.