*Please submit this completed application, the supplemental budget spreadsheet, and any relevant supporting documentation by the deadline indicated in your Step 1 notification letter to* *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 SSC Program Advisor, Micah Kenfield, at* *kenfield@illinois.edu*

# General Information

**Project Name:** E37 Parking lot Solar Lighting

**Total Amount Requested from SSC:** Total Project Cost

**Project Topic Area(s):** [x] Energy [ ] Education [ ] Food & Waste

 [ ] Land [ ] Water [ ] Transportation

# Contact Information

### Project Lead

Applicant Name: Mike wise

Unit/Department: UIUC Parking Department

Email Address: mwise@illinois.edu

Phone Number: 217-333-3530

### Financial Contact *(Must be Full-time University of Illinois Staff Member)*

Contact Name: Michelle Wahl

Unit/Department: UIUC Parking Department

Email Address: mwahl@illinois.edu

Phone Number: 217-244-9170

Organization Code: CFOP # 293000

### Facilities Management Contact *(If Applicable)*

Contact Name: N/A

Email Address: Preferred Email Address

**Primary Project Team**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| Michael Wise | Parking | mwise@illinois.edu |
| Paul Foote | ACE Student | gfoote2@illinois.edu |
| Name | Department/Organization | Email Address |
| Name | Department/Organization | Email Address |

# Project Description

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

Please address all of the above items including concrete examples of the desired outcomes The E37 parking lot has insufficient lighting to meet the minimum light requirements. The lot must be updated to current light lumens requirement of .2 candle ft. After two surveys confirming the inadequate lighting situation it has been determined new light poles are needed to meet the minimum requirement of .2 candle ft. The attached images reflect the current lighting in this area. Once evaluated it is determined that the installation of 6 new parking lot light and light poles are needed to achieve proper lighting requirements. The addition of grid powered lighting will add to the electricity demands and increase campus carbon footprint. We have concluded that the use of solar powered lighting would be the best overall addition to the campus parking lot lighting in terms of carbon footprint and continuing to follow the campus iCap goals for 2025/2050.

**How will the project improve the sustainability of the Illinois campus and how will the project go above and beyond campus standards?**

Remaining carbon neutral is paramount to new projects on campus, the fact that lighting is essential for minimum levels of visibility and safety this project is 100% reduction in grid power from campus electricity production. The campus standards only require grid tied lighting to be installed for lot lighting and adding this type of lighting would increase the grid power load and demand for campus electricity along with co2 emissions and overall carbon footprint. This project eliminates this extra demand and pollution. Once successfully installed it will also serve as an example and set a precedence for other future lighting projects on campus.

**Where will the project be located? Will special permissions be required to enact the project on this site? If so, please explain and submit any relevant letters of support with the application.**

E37 parking lot is located in the south west corner of campus between Griffith Drive and Oak Street just south of St. Mary’s Rd, while seemingly remote from the quad and perhaps considered low visibility from a projects standpoint. This location is in the heart of Research Park and Oak St. is a main feeder road that provides access for the Research Park population which will provide for visibility of the project to all that travel here. No special permissions needed

**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 will be benefitting from this project. Please attach letters of commitment or support at the end of the application.**

This project falls under the renewable energy category for ICECF grant funding. The ICECF budget is currently closed. Once opened we intend to apply for a grant to offset this installation. Should this grant be awarded we can return the award to SSC for future use in other projects

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

Paul Foote is the parking student worker that researched, surveyed, and designed the project, student role also has a part in project management during implementation. The several buildings this lot provides access to have been an ongoing point of concern for the students using them, especially in the fall winter and spring months when sundown is earlier in the evening. The darkness in the area does not provide minimum lighting to be able to operate safely and securely in this lot. Adding these lights will benefit all students utilizing the Entomology Labs, Pest Management labs, Hydrology labs and various storage buildings used by these students. In addition campus is in the process of converting one of the storage buildings into a computer repair center for campus population, this will be used and benefit students.

# 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?**

Electric vehicle charging station in lot B4, 2014

**If this 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?** No, the ongoing maintenance PM schedule will be Parking Departments responsibility**.

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

N/a

**Please include any other sources of funding that have been obtained or applied for. Please attach any relevant letters of support as needed in a separate document.**

This project falls under the renewable energy category for ICECF grant funding. The ICECF budget is currently closed. Once opened we intend to apply for a grant to offset this installation. Should this grant be awarded we can return the award to SSC for future use in other projects

# Environmental, Economic, and Awareness Impacts

*In addition to the below questions, please indicate specific measurable impacts as applicable on the supplemental budget spreadsheet.*

**Which aspects of sustainability does your project address, and how? Does the project fit within any of the iCAP goals? If so, how does the project go beyond the university status quo standards and policies.**

Yes it falls under the Energy category. Remaining carbon neutral is paramount to new projects on campus, the fact that lighting is essential for minimum levels of visibility and safety this project is 100% reduction in grid power from campus electricity production. The campus standards only require grid tied lighting to be installed for lot lighting and adding this type of lighting would increase the grid power load and demand for campus electricity along with co2 emissions and overall carbon footprint. This project eliminates this extra demand and pollution. Once successfully installed it will also serve as an example and set a precedence for other future lighting projects on campus.

**How will the environmental impacts of your project be measured in the near and long term? What specific monitoring and evaluation processes will you be using to track outcomes and progress?**

We can utilize the campus utilities services to compare existing (non-solar lighting) light electricity consumption costs and CO2 output from the grid power to the solar powered lighting.

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

There will be a coordinated effort to include iCap, media release, and SSE will be asked to do a feature project update.

**What are your specific, measurable outreach goals? How will these be measured?**

 The project is designed to meet specific lot lighting levels of .2cfl or higher, these measurements were used in the initial survey of the lot area and the results will be compared with after installation results to ensure proper lighting levels have been reached. In addition the lighting is to serve the lot user population and provide visual and for safety concerns, we will follow-up with users mentioned previously to check satisfactory lighting has been achieved.

**Do you have any additional comments or relevant information to aid in evaluation of this application?**

In reference to the previous project: the electric vehicle charging on campus has been successful (although we have not installed the B4 location yet) and I was successful in acquiring the DCEO rebate which was used to implement the next station. This same diligence will be utilized in pursuing the ICECF funding of this Solar lighting Project