*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 at* *Sustainability-Committee@Illinois.edu**.*

# General Information

**Project Name:** Classroom LED Upgrades

**Total Amount Requested from SSC:** $29,500

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

 [ ] Land [ ] Water [ ] Transportation

# Contact Information

### Project Lead

Applicant Name: Bradley Klein

Unit/Department: Capital Programs/Utilities

Email Address: bradklei@illinois.edu

Phone Number: 217-300-3400

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

Contact Name: Doris Reeser

Unit/Department: Facilities & Services / Capital Programs

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Organization Code: 814000

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

Contact Name: Greg Moen

Email Address: gamoen@illinois.edu

**Primary Project Team**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| Bradley Klein | F&S/Capital Programs | bradklei@illinois.edu |
| Greg Moen  | F&S/Utilities | gamoen@illinois.edu |
| Doris Reeser | F&S/Capital Programs | dreeser@illinois.edu |
| Name | Department/Organization | Email Address |

# Project Description

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

Project Background: The proposed project is a campus-wide upgrade of general assignment classroom incandescent lighting. Classrooms across campus are typically lit with fluorescent lighting, which tends to be energy efficient and low maintenance. In some classrooms, however, there are incandescent fixtures used for supplemental lighting at chalkboards, podiums, and recessed can lights. These incandescent lamps burn out quickly and use much more electricity than comparable LED lamps. The funds to replace these are minimal, and have to compete with other classroom needs such as repairs to floors, ceilings, walls, chalk boards, window air conditioning units, etc.

Project Goals: The goal of this project is to provide new LED lamps in all incandescent light fixtures in general assignment classrooms across campus.

Desired Outcomes:

1. The new classroom lamps will save electricity;
2. There will be reduced complaints from instructors about burned out lamps;
3. The upgraded lighting will improve visibility of text, etc. which will improve student learning;
4. The new lamps will reduce waste from burned out lamps; and
5. The new, long-lasting LED lamps will save labor in relamping fixtures.

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

The LED upgrades will reduce electrical use in classrooms across campus, thus reducing electrical production requirements, and reducing green house gas emissions. The project will upgrade old lighting that does not meet the current campus standards. New lighting will meet or exceed existing campus standards in terms of low energy use.

**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.**

The project will be located in approximately 75 general assignment classrooms across campus. These classrooms are scheduled through the Office of the Registrar, Facility Management and Scheduling unit, whose letter of support and cooperation is attached. The periodic maintenance of these classrooms is funded by the Provost’s office and administered by the Deferred Maintenance and Classroom Programs group in Capital Programs, Facilities & Services. A letter from the Director of these programs is attached.

**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.**

No specific individuals, groups or departments will have a stake in this project. The work will be performed by Facilities and Services. Staff from the Electricians Shop have been involved with preparing the budget and schedule. There are no other funding sources for this project.

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

This project will impact students by improving the quality and reliability of lighting in many classrooms across campus. The planning and execution of the project will involve 1 to 3 student interns in the Deferred Maintenance and Classrooms Programs at Facilities & Services.

# 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?**

Applications for funding of light shelves at Altgeld Hall and insulation at Noyes Lab steam tunnel were submitted in 2015 and 2016. Neither were awarded funding.

**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?

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

No ongoing funding will be required. An”attic stock” of 75 new LED lamps is included for future maintenance needs.

**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.**

No other funding sources have been identified for this project.

# 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.**

The LED Upgrades project conserves electric energy by reducing the amount of energy needed to deliver lighting to classrooms. This is done by replacing inefficient incandescent lamps with more efficient LED lamps. It will help with two ICAP goals: reducing energy utilization and reducing energy emissions. It will also help reduce the amount of solid waste generated by replacing lamps less frequently. While the project does not specifically exceed current standards, it will retrofit inefficient lighting to meet current standards and exceed them where possible.

**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?**

Overall building electricity usage will be compared before and after LED upgrades are performed. Because the value of upgrading to LED lamps is well understood, we do not propose to do any supplemental monitoring or measurements.

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

Facilities and Services web site and newsletters will be used to share information about SSC and the project. Additionally, each room improved by the project will have special signage indicating the amount of energy saved, cost reduced, and GHG eliminated.

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

We will seek a commitment from F&S Customer Relations and Communications that an article about SSC and the project will be written and distributed via weekly email newsletter and monthly printed newsletter to over 1200 University employees. Our goal will be measured by whether the email and printed newsletters share our story.

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

I hope this project is approved as a way to meet ICAP goals and help with a solution that will reduce energy use and maintenance across our campus. Thank you for your commitment to making the University of Illinois a better steward of the environment.