**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. All SSC funding is 100% from student green fees, so the projects funded by the students must benefit them.

**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 requests for food and prizes but will consider proposals on a case by case basis.
5. SSC can fund repairs and improvements to existing building systems as long as it works toward the goal of improving campus sustainability.
6. SSC can provide departments with loans for projects with a distinct payback. 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.

**Instructions**

*Submit this completed application and one map, graphic, or picture to* [*Sustainability-Committee@Illinois.edu*](mailto:Sustainability-Committee@Illinois.edu)*. Please adhere to the session word counts. The committee holds the right to decline applications over the designated word counts. If you have any questions about the application process, please contact the Student Sustainability Committee Coordinator at* [*sustainability-committee@illinois.edu.*](mailto:sustainability-committee@illinois.edu.)

**Project Name:**  0339 Temple Hoyne Buell Hall – DDC Upgrade of Room Equipment

**Total Amount Requested from SSC:** $150,000

**Primary Project Leader Name & Email:**  Dylan Peplinskie - [peplidal@illinois.edu](mailto:peplidal@illinois.edu)

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| **Project Abstract:** In less than 100 words, briefly describe your project. |
| **An HVAC controls upgrade at Temple Hoyne Buell Hall to reduce building energy footprint and increase indoor air quality for students and staff. Currently the room level HVAC equipment at TBH is outdated and failing. Failed equipment cause an increase in excess heating/cooling throughout the year which reduces comfort level and results in large energy costs. This project will replace these controllers with digital Siemens controllers which allow more functionality to reduce airflow and better control space conditions.** |

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|  | Education | Energy | Food & Waste | Land & Water | Transportation |
| Project Category |  | X |  |  |  |

**Project Team Member List** (student projects must include their faculty/staff advisor’s information)

|  |  |  |
| --- | --- | --- |
| Name | RSO/Department | Email Address |
| Dylan Peplinskie | Utilities and Energy Services | [peplidal@illinois.edu](mailto:peplidal@illinois.edu) |
| David Hardin | Utilities and Energy Services | [dwhardin@illinois.edu](mailto:dwhardin@illinois.edu) |
| Justin Brooks | Utilities and Energy Services | [jdb@illinois.edu](mailto:jdb@illinois.edu) |
| William Shafer | Utilities and Energy Services | [wshafer@illinois.edu](mailto:wshafer@illinois.edu) |
| Harold Gross | Utilities and Energy Services | [hagross@illinois.edu](mailto:hagross@illinois.edu) |
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| Questions | Yes | No |
| Is this a student-led project? |  | X |
| If applicable, have you received approval from Facilities & Services and/or site manager? | X |  |
| Do you have a plan for ongoing funding beyond SSC? (SSC cannot guarantee ongoing financial support) | X |  |
| Beyond SSC, do you have sources contributing funding or support (ex. staff time, external grants, etc.) to this project? | X |  |
| Have you applied for SSC funding previously? | X |  |

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| **Project Timeline** |
| SSC funding agreements remain active for two years. Please list your project’s timeline and/or milestones. |
| Upon receipt of material, we expect this project to take less than a year to complete. There are 98 variable air boxes in the building which will have their existing pneumatic controls replaced with direct digital controllers.  This project will be separated into two phases, one for each of the air supply units in the building. The first milestone will be to replace the controllers on all VAVs which are served by AHU-1. The second milestone will be to replace all VAVs served by AHU-2. Each milestone will be reached once the new controller, damper actuator, valve actuators, and thermostats are installed, operational and the old equipment removed. |

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| **Project Description** |
| In 250 words or less, describe your project. What does your project hope to accomplish? What are your project’s deliverables? Bullet points welcome. |
| Due to failed equipment controllers, the room level air supply equipment is not operating efficiently which is causing increased energy costs and reducing occupant comfort. These controller failures are often not noticed as other equipment is able to mask the issue by excessively cooling or heating the air supplied to a space. This causes excess heating to occur year-round which greatly increases building utility usage, and sometimes results in offices and classrooms being too hot or too cold depending on the time of year. This project will replace all the controllers in the building to digital to ensure the equipment is controlling properly, to reduce the excess energy use. Newer equipment controls allow for finer control of air supply units and heating valves which will further reduce energy use, and also allows for remote monitoring which will notify Facilities & Services of equipment or controller failure.  Our project hopes to replace all 98 pneumatic controllers with new Siemens DXR controllers and thermostats. We will also make necessary piping changes to the perimeter heating coils on the classrooms that are served by AHU-2 in order to fix a long standing issue that caused excess steam usage throughout the year.  We aim to have this project jointly funded between various groups for a total project cost of $600,000, with $150,000 being supplied by the student sustainability committee. We expect this project to have a payback of roughly 5 years. |

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| **Environmental Impact** |
| In 200 words or less, how does your project increase environmental stewardship at UIUC? If applicable, what is the carbon, water, waste, and/or energy savings? Does your project relate to the iCAP? Bullet points welcome. |
| This work is directly related to the iCAP as this project’s goal is to reduce the University’s overall energy footprint.  When complete the buildings energy usage should be lowered to the same values of 201. This should result in a reduction of steam (42%) and electrical (11%) usage. These can be measured through the campus billing system, and with today’s utility rates should result in savings of $97,986 annually with a total project payback of 5 years. |

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| **Student Impact** |
| In 200 words or less, how will this project benefit students? How will students be involved with this project? What educational components are in your project? Bullet points welcome. |
| Students will be benefitted through increased indoor air quality in the building. Newer controls will prevent excess heating and cooling throughout the year which will make office and class spaces more comfortable. |