

#### STUDENT SUSTAINABILITY COMMITTEE

### 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-</u> <u>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>sustainability-committee@illinois.edu</u>.

#### **General & Contact Information**

Project Name: iSEE Composting Project Total Amount Requested from SSC: \$6000

Project Topic Areas: Land & Water K Education Energy

Applicant Name: Meredith Moore

Campus Affiliation (Unit/Department or RSO/Organization): Institute for Sustainability,	Energy,	and
Environment		

Email Address: mkm0078@illinois.edu

#### Check one:

 $\square$  This project is solely my own **OR** 

This project is proposed on behalf of (name of student org., campus dept., etc.):

#### **Project Team Members**

Name	Department	Email
Name	Department/Organization	Email Address

#### **Student-Led Projects (Mandatory):**

Name of Faculty or Staff Project Advisor: Advisor's Email Address:

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

Contact Name:	Meredith Moore
Unit/Department:	Institute for Sustainability, Energy, and Environment
Email Address:	mkm0078@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 Institute for Sustainability, Energy, and Environment (iSEE) is responsible for leading campus sustainability efforts. To set an example for students, faculty, and staff, iSEE is proposing a markable — and visible — program that will reduce waste and beautify campus.

Food and compostable waste make up an estimated 30% of all waste generated on-site. The iSEE staff plans to implement an on-site compost tumbler program to collect food waste, coffee grounds, and shredded paper from offices in the National Soybean Research Center (NSRC) building, where the Institute is housed. The next step of this project is to construct a pollinator garden on the west side of the building, which the office compost would help maintain. In addition to reducing food waste, this project provides an educational opportunity intended to engage students, staff, and faculty.

This project will significantly reduce this category from our waste stream. Using a compost tumbler will reduce the amount of coffee grounds, shredded paper, and food scraps that get thrown away, while providing an engagement and educational opportunity on waste and carbon reduction. Effective signage with clear visuals of what can and cannot be disposed of will eliminate confusion. Periodic inventories will be conducted and the data will be sent out to the participating offices to continuously engage the students, staff, and faculty. The nutrient-rich compost will enrich the proposed garden, an aesthetically-pleasing opportunity to recycle our organic resources. This program provides environmental stewardship education and hands-on learning opportunities, which will be an advertised example of office sustainability best practices. It is the intention that these efforts will encourage other offices and individuals to partake in similar programs to manage dayto-day waste and make alternative purchasing decisions (e.g., switching from purchasing K-Cups to using coffee pots). Since various events and meetings are held in the NSRC building, the signage and collection sites will set a positive example for all who visit the building. iSEE interns and environmental/food waste RSOs will help maintain the tumbler and garden, keep track of the metrics, and document the steps of this program to eventually provide a framework to other offices interested in implementing a similar project. This composting program coupled with extensive educational efforts will encourage people in and around NSRC to become more conscious about purchasing, consuming, and discarding food. Reducing food waste encourages longterm sustainable behavior, which students, faculty, and staff can take back to their homes and share with their peers.

#### 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 compost tumbler and garden will be located on the west side of the National Soybean Research Center. We are in collaboration with the University Landscape Architect (Facilities and Services) to help install the garden (see attached Letter of Support) and ensure that all landscape and grounds requirements and permissions are met. This project and location has been approved by the Architectural Review Committee (ARC).

# 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 Institute for Sustainability, Energy, and Environment will be at the forefront of implementing this project, including on-site staff and student interns. Facilites and Services will also be involved by helping to plan and construct the garden (see attached Letter of Support). Several RSOs have expressed interest in getting involved with helping to assist with maintenance of this project (e.g., Project4Less, Act Green).

In preliminary discussions, there has been very positive support of this project with many individuals expressing their desire to get involved once the project is implemented; therefore, any person who wishes to assist or learn about composting and/or local food waste diversion programs from the landfill will be welcome. As previously mentioned, the tumbler will be on-site at the NSRC but will be open for anyone to contribute to. No additional funding is expected to be contributed.

#### How will this project involve and/or benefit students?

#### This includes both direct and indirect impact.

A compost tumbler will generate curiosity among students regularly passing through the grounds from Pennsylvania Avenue to campus. Curiosity drives education, action, and involvement. Students entering or passing by NSRC who use the composting tumbler to discard their food scraps learn that they have contributed to the nutrient cycle instead of the landfill. A change in habits can be as simple as using a bin strategically placed near pedestrians' normal route. These pedestrians will have ownership of the success of this project, and they may begin to look for other places to compost. Students from the varied sustainability-related disciplines throughout the University will want to see the composting tumbler — and, once they do, they might request that the administration make such devices available throughout campus. The best thing that can happen is that composting tumblers become a recognized practice at Illinois. A value-added benefit to this project will be a pollinator garden maintained with on-site-generated compost. This project will allow students to see that iSEE and other offices in NSRC are dedicated to improving sustainability at the U of I and slowing anthropogenic climate change. It will provide a place for building workers to simply and habitually compost and steer others to this location.

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

iSEE will help promote this project on social media outlets, the iSEE newsletter, and provide monthly updates to those who occupy the NSRC building and participate in generating food waste for the tumbler. Since this project encourages collaboration between environmental RSOs, we will work closely with those who assist and help maintain the project as well as the SSLC to communicate project information. We will continuously advertise the composting project to students who wish to get involved and learn more about small-scale food waste diversion programs. During future Earth Month and Campus Sustainability Week events, there will be events to demonstrate how the compost tumbler and garden function, and showcase the steps it took to implement a composting project. This will encourage tumbler usage and provide helpful step-by-step information and guidance for those wishing to start their own composting or food waste diversion programs.

#### **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? N/A

### 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.

This project is not expected to require any ongoing funding from SSC. If additional funding is required after the first year and SSC funding is not a possible option, we will identify other grant sources (e.g., from iSEE, EPA, Champaign County, etc). Since food waste will be a constant source for the tumbler and as a garden fertilizer, the only expected support that we may need in the future is to expand the garden by installing additional plant species.

#### 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 <u>Illinois Climate Action Plan</u> (iCAP) goals?

1. This project completes the circle of nutrient cycling, which is a sustainable system.

2. This project will lessen the need for trash pick-up, decreasing VMTs for campus vehicles.

3. This project will inspire students and other campus members to look for other sustainable practices to incorporate into their daily lives at the University.

The Chancellor has invited students to participate in the iCAP process. Students consistently express a desire to have composting on campus. (See, for example, the suggestion on Student Input Session November 6 Resilience Ideas: "Student composting/volunteers, send to nearby areas." See also, student Input Session November 6, Education Ideas: "More info about food waste in the dining halls!")

This project will fulfill iCAP 2015 objectives as follows:

#### A. Chapter 2, section 2:

"Reduce fleet emissions in the next five years." Less garbage generation means fewer trash pickups, less fuel expended, and fewer GHGs generated.

#### B. Chapter 6, "Zero Waste Goals" paragraph:

"...one of the aspirational goals of the [ZWP] is for individuals to take personal responsibility regarding the final destination of their own waste products." Composting rather than discarding food waste is a simple personal responsibility.

#### C. Chapter 7, section 2:

"It is also important to evaluate campus maintenance practices with respect to landscaped areas." A composting tumbler would provide compost for an on-site showcase garden at NSRC.

#### D. Chapter 7, section 3, paragraph 1:

"The campus will become a model of sustainable design and management through its everyday actions..." Daily composting in our own space is a model for other units and institutions.

#### E. Chapter 9, section 2, paragraph 1:

"Many...projects pay back their up-front costs in a reasonable period of time, and thus represent sound financial investments...The campus should increase the number of such projects..." The composter will pay for itself in energy and resource savings quickly.

### 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 keep track of the amount of food waste that enters the tumbler instead of the landfill as well as the amount of compost that is applied to the garden. The compost will be used as a soil amendment to a pollinator friendly garden, which will foster local and migratory insect populations. We also plan to conduct a"before" and "after" soil test to determine the positive impact that this garden and compost will have on the soil quality of the area. We expect a positive environmental outcome since the compost will improve the biological, chemical, and physical characteristics of soil by acting as a natural filter and increasing resilience to extreme environmental events (e.g., soil erosion, desertification, flooding, droughts). Short-term, this project will also bring a positive aesthetic component to campus and serve as a living lab experience. As an educational long-term impact, we hope that this project will encourage an appreciation and understanding of even small-scale local recycling opportunities and promote the feasibility of similar composting projects on campus. Additionally, the soil over time will become healthier and more nutrient-rich as compost has the potential to degrade pollutants and improve water quality by retaining water and reducing stormwater runoff. Compost also sequesters carbon.

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

1. The initial goal for outreach to students is to successfully solicit enough volunteers to help start and run a pilot composting program within the immediate area of the National Center for Soybean Research Center (NSRC) building at 1101 West Peabody.

2. We foresee the composter near the NSRC building being a symbol of sustainability to all who pass by the area.

3. After adjustments to the program implemented following the pilot, the secondary goal is to continue the program until there is enough of a student volunteer corps to expand to other locations on campus.

4. This program will be a practical demonstration of the University's commitment to the iCAP 2015 outreach goal of becoming a, "model of sustainable design and management through its everyday actions." (2015, Chapter 7, sect.3, para 1)

5. It will be an example of successful composting to the entire campus and to other universities.

6. The composter project will demonstrate the University's good faith and integrity in promoting and implementing projects that support its stated goals.

7. This program will demonstrate to students the beauty and sustainability of the full nutrient cycle: soil-plant-food-waste-compost-soil.

How will this project inspire change at UIUC?

1. This project will make people think about how much food they purchase and where their waste ends up.

2. This program will encourage our campus community to reduce food waste in general.

3. This program will inspire people to think of composting as a cooperative activity.

4. This project will normalize everyday composting for participating units and for those passing by the composter.

5. Signage: This project will make it easy for people to see the benefits of composting when they see a garden with signage indicating that it is part of a composting project

6. Students participating in the volunteer composting corps will spread the word about composting and will engage others in discussion about it. These discussions will lead to other students participating in composting or advocating for composting elsewhere.

If applicable, how does this project impact environmental injustice or social injustice?

"According to the EPA, more than 34 million tons of food waste gas [was] generated in 2010 alone" (Institute, n/d). Food in a sustainable cycle circumvents the landfill. People in neighborhoods bordering or near landfills live with the burden of greater impact of exposure to methane emissions, volatile chemicals, and toxic substances. There are risks of increased instances of respiratory problems, low birth weight, birth defects, kidney/urinary tract disorders, immunologic abnormalities, and certain types of cancers (Vrijheid, 2000). Untended food waste attracts rodents, some of whom are disease vectors. "The cumulative impact of environmental injustice, due to the spatial concentration of environmental hazards, factories, and noxious land uses, leads to increases in adverse health outcomes and community stress as well as lower quality of life and community sustainability" (Roelofs, et al, 2018). The University of Illinois currently ships its trash to the Brickyard Landfill in Danville, Illinois (M.B. White (personal communication, November 22, 2019)). There are homes within several hundred feet of this landfill; residents of these homes may be at increased risk for such adverse health effects. Decreasing the University's contribution to this landfill will necessarily decrease the University's contribution to these ill effects. If this project grows, the amount of food diverted from the landfill will be significant, and this will make a significant impact on the amount of landfill waste that promotes environmental injustice.

#### References

Institute for Sustainability, Energy, and Environment. "Reduce foodwaste." iCAP, University of Illinois. Retrieved from https://icap.sustainability.illinois.edu/project/reduce-foodwaste Roelofs, C., Baron, S., Wilson, S. & Aber, A. (2018). "Occupational and environmental health equity and social justice." In Occupational and environmental health: recognizing and preventing disease and injury. Levy, B., Wegman, D., Baron, S., & Sokas, R. (eds.)

University of Illinois. (2015) Illinois Climate Action Plan.

Vrijheid, M. (2000, Mar) "Health effects of residence near hazardous waste landfill sites: A Review of Epidemiologic literature. Environmental health perspectives. Vol I (08), Supplement.