**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* *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 Student Sustainability Committee at* *sustainability-committee@illinois.edu.*

**General & Contact Information**

**Project Name:** Precious Plastic Campus Recycling Hub

**Total Amount Requested from SSC:** $40,500

**Project Topic Areas:** [ ]  Land & Water [ ]  Education [ ]  Energy

[ ]  Transportation [x]  Food & Waste

**Applicant Name:** Neil Pearse

**Campus Affiliation (Unit/Department or RSO/Organization):** Informatics/Fab Lab

**Email Address:** npearse@illinois.edu

**Check one:**

 [ ]  This project is solely my own ***OR***

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

**Project Team Members**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| Neil Pearse | Informatics/ Fab Lab | npearse@illinois.edu |
| Jessica Hogan | Informatics/ Fab Lab | jnelso@illinois.edu |
| Mathew De Venecia | Alumni Volunteer | Engineer.mndv@gmail.com |
| 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: Neil Pearse

Unit/Department: Informatics/Fab Lab

Email Address: npearse@illinois.edu

**Project Information**

*Please review the proposal materials and online content carefully. It is highly recommended 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:**

Rapid prototyping and new product development are at the heart of the innovative work done on our campus.  While this is a much-needed form of advancement, it often comes at the cost of increased waste generation.  We would help reduce the burden on local landfills through the following:

* Become Illinois’s first active recycling node in the Precious Plastic network.  Precious Plastic is a global recycling movement that provides knowledge and resources for sustainable practices that have been gathered by teams around the world.  Joining the network will also provide a platform for us to share what we learn with a wider audience.
* Divert up to 100 pounds of plastic waste from the landfill each day (based on the capacity of the equipment)
* Reduce the amount of new plastics used for rapid prototyping on campus by at least 1,500 pounds/year by offering a recycled option at a lower cost. (based on material consumption at the CU Community Fab Lab)
* Educate student designers and fabricators on working with recycled materials by providing them with the opportunity to participate in the recycling process from the ground up
* Create an Infographic showcasing the results of this recycling effort and display it on our website and social media

The Fab Lab and Informatics Department will contribute through

* Funding staffing and space to keep the equipment operational and available for use in our community
* Ensuring our staff are trained to operate and instruct students on safe use of the equipment by creating operational and safety documentation
* Leveraging supervisory and support staff to assist with communications, promotions, and website development

**Where will the project be located? Are special permissions required for this project site?**

*This project would be located in the Fab Lab at 1301 S Goodwin Ave. No special permissions are required*

**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.**

*Ischool/Informatics/Fab Lab – will support the project through immediate and ongoing funding for staffing*

*Student entrepreneurs and Enactus student groups– will have access to plastic recycling and manufacturing equipment to create new products*

*Campus makerspaces (MakerLab, CITL, Arch Shop, etc…) – will be able to recycle sorted plastic waste locally on campus and receive new material made from the recycled content.*

*UIUC Students/Faculty/Staff – will have open access to recycling tools and knowledge through the Fab Labs existing open lab time. This would include being able to consult with staff experienced in the recycling process.*

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

This project will directly benefit students in 4 ways.

1.     Reducing the amount of plastic waste being sent to local landfills from prototyping courses, organizations, and activities.

2.     Offering an affordable recycled material alternative for student projects by selling our recycled product to campus community members at cost.

3.     Sharing information on how to handle and utilize altered properties of recycled materials in the manufacturing or design process.

4.     Providing education on the recycling process and common pitfalls.

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

This project will be publicized on department websites (Fab lab and Informatics). Additionally, we will strive to raise awareness through promotion at campus events such as the Innovation Expo. We will be able to leverage the existing promotions team at the Fab Lab to create content for these promotions.

# Financial Information

*In addition to the below questions, please submit the supplemental budget spreadsheet available on the Student Sustainability Committee* [*website*](http://ssc.sustainability.illinois.edu/?page_id=2087)*. 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?**

No

**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?***The Informatics department and the existing Fab Lab operations budget will support ongoing staff and repair costs for this project.*

**Please include any other obtained sources of funding. Have you applied for funding elsewhere?**

*No other materials funding has been obtained.*

# 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** [**Illinois Climate Action Plan**](https://icap.sustainability.illinois.edu/) **(iCAP) goals?**

Creating a local community driven recycling hub on campus will help to increase environmental stewardship by raising awareness of the amount of waste generated throughout the fabrication process while promoting accessible recycling practices.  This relates directly to the iCAP in the following ways

·       Reduces the amount of new resources needing to be purchased and shipped onto our campus

·       Lengthens the lifespan of a piece of plastic, meaning that it stays out of our local landfill longer.

·       Offers a recycled alternative to some of the new resources currently used on campus.

·       Teaches participating students about the effort and resources required in the recycling process and emphasizes why it is important to reduce, reuse, and recycle.

      The outcomes stated above will help the University towards its iCAP goal of increasing the diversion rate from landfills to 95% by FY25. Also, interactions with this project will encourage commitment to sustainability at the individual level beyond direct interactions with the University

**How will you monitor and evaluate the project’s progress and environmental outcomes? What short-term and long-term environmental impacts do you expect?**

We will evaluate and monitor direct progress by tracking the amount of plastic diverted from landfills and the number of new projects created with recycled content. We will also track the number of patrons who make use of the recycling equipment and material to better understand how many people we are able to reach and educate on plastic recycling. The short-term impact of this project will be a reduction of plastic waste sent to local landfill. Through educating our community on the impact of material choices we hope to see a long term reduction of new materials imported onto campus.

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

We aim to engage 250 people in the local recycling process during our first year of operation (based on current capacity and Lab attendance during Fall 2020). Our goal is to educate our campus population on the effort required to physically gather, sort, shred, and remanufacture with recycled material. With this knowledge, our community will be better prepared to make thoughtful decisions on what new materials to purchase and how to go about minimizing our waste.

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

The Fab Lab will be open to the public after COVID-19 restrictions are lifted. It is a space where anybody from the community is welcome to visit and express their creativity by experimenting with various types of manufacturing and design processes. While fees charged here for the use of machines and materials are affordable, offering recycled materials at a reduced cost would further increase the accessibility of our services to lower income individuals.

Additionally, the poor and marginalized are disproportionately affected by global warming, especially those in coastal or tropical cities that do not have resources to address the damage caused by climate change. Increasing the U of I’s capacity to divert waste from landfills will reduce our carbon footprint and contribution to this problem.  (https://www.mercycorps.org/blog/climate-change-poverty)

Lastly, our facility is one based in education and provides a safe space for both the U of I community and general public to experiment with design. In addition to regular operations, the Fab Lab also hosts hackathons, summer camps, and works with long-term community partners to help provide opportunities for learning and personal growth among marginalized communities. These existing, long-term partnerships will provide us with an audience for this project that is often excluded from similar opportunities. Any positive impact on environmental/ social injustice that results from this project will surely be multiplied by those who learn from us. (http://cucfablab.org/community-engagement/)