**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**. 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.*

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

**Total Amount Requested from SSC:** $86,000

**Primary Project Leader Name & Email:**  Neil Pearse – npearse@illinois.edu

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| **Project Abstract:** In less than 100 words, briefly describe your project.  |

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| **Reducing the plastic waste from campus shops and makerspaces by providing a community driven recycling hub in the “PreciousPlastic.com” network.  The recycled waste would be made into materials that are once again useful in the shops that created the initial waste.  Our goals are to reduce the amount of waste sent from campus to the landfill, to raise awareness about the effort that goes into the recycling process, and to create useful recycled materials for students to work with.** |

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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)

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| Name | RSO/Department | Email Address |
| Neil Pearse | Informatics – Fab Lab | npearse@illinois.edu |
| Jessica Hogan | Informatics – Fab Lab | jnelso@illinois.edu |
| Matthew De Venecia | Alumni Volunteer | engineer.mndv@gamil.com |
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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. |
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| **TImeline and Budget**

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| **Milestone** | **Staffing** | **Cost** |
| Quarter 1: |
|  Order equipmentplastic shredder ($7000), sheet press ($2000), injection molding machine ($1500), extruding machine ($6000), form and mold materials/ templates ($5000), aspire design software ($2000), CNC upgrades to make custom forms ($5000) storage bins for raw waste ($1000), storage racks for finished material ($1000), collection cart for picking up raw waste ($500), Ipad for data collection ($600), power connections for machines ($5000), laser cutter optics for testing ($1000), ventilation upgrades for plastic fumes ($2000), RFID based tool access/usage tracking system ($2000) | 16 hours for 1 staff member | $400$41,600 |
| Receive equipment and assemble  | 160 hours each for 2 staff members | $8000 |
| Quarter 2: |
| Test run equipment with Fab Lab plastic waste.Begin recruiting lab and shop spaces into the waste collection network. | 80 hours each for 2 staff members  | $4000 |
| Develop and implement training standards for equipment use by staff and students | 80 hours each for 4 staff members  | $8000 |
| Quarter 3: |
| Make equipment accessible to interested campus community members who complete tool safety training | 80 hours each for 4 staff members  | $8000 |
| Engage students to create and use recycled materials for rapid prototyping work through the use of Fab Lab website, social media, and peer to peer networks such as Enactus | 80 hours each for 2 staff members  | $4000 |
| Quarters 4-5: |
| Publish a report on the statistics of the materials recycled through this system.  Including the following data points:Weight of plastic diverted from landfill, Amount of virgin plastics saved by offering a recycled substitute, Amount of labor to produce recycled materials, and Amount of Electricity used to recycle materials.  This report would be made into an engaging infographic and shared with the campus community through the Fab Lab website and social media. | 80 hours each for 2 staff members  | $4000 |
| Quarters 5-6: |
| Look at expanding the collection network to include other streams of waste such as plastic water bottles, shopping bags, etc… | 80 hours each for 4 staff members  | $8000 |

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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. |
| 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 Plastics network.  This will grant access to the knowledge and resources that have been gathered by teams across the globe.  It 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* Continuing operations beyond the 2 years that would be funded
* Ensuring our staff are trained to operate and instruct students on safe use of the equipment
* Leveraging supervisory and support staff to assist with communications, promotions, and website development
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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. |
| 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 that goes into the recycling process and why the important hierarchy of Reduce, Reuse, Recycle exists.      The outcomes stated above will help the University towards its iCAP goal of increasing the diversion rate from landfills to 95% by FY25. This project will also promote commitment to sustainability at the individual level beyond direct interactions with the University.* + Teaches participating students about the energy and resources that go into the recycling process and why the important hierarchy of Reduce, Reuse, Recycle exists.
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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. |
| 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 recycled materials in the manufacturing or design process.4.     Providing education on the recycling process and common pitfalls. |