**Clean Energy Grant Application**

EVERGREEN

**THE EVERGREEN STATE COLLEGE**

*Please read the grant application guidelines prior to submitting your proposal. We will not consider incomplete applications. Completed applications should be e-mailed to the coordinator at cleanenergy@evergreen.edu before the deadline. For questions regarding the application process, contact the coordinator.*

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| **Project Title** | **Alternative Energy Display: Solar & Rain Shelter** | |
| **Project Lead** | Name: | **Katherine Houston** |
| | E-mail: | |
| | Phone number: | |
| **Student, Staff, Faculty, or Student Group:** *(staff and faculty please name department)* | **Alt. Energy Demonstration Group of the Light Step Program: Marycolleen Foley, Julie Austin, Christopher Gerber, Dylan Ohnemus, Dylan Gutierrez, Skyler Schoos, Eric Knowles, Sarah Redden & Austin Carter** | |
| *Students only* | Class standing: | **All (Sophomore & Senior Lead)** |
| | Faculty or Staff sponsor: | **Anthony Tindill** |
| **Campus Location** | **Near info. display at Parking Lot C** | |
| **Date** | **April 25th, 2012** | |

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| **Abstract** | The solar-powered rain shelter will provide the visitors and commuters of TESC with a designated lit location to wait away from the elements while simultaneously displaying methods of alternative energy & building design. The shelter will be located near the information display at Parking Lot C and will include an artistic solar panel, a wood & tire bench as well as a tire-garden living wall. |

**CEC Vote: (for office use only)**

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| **Proposed Motion** | |

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| **Moved:** | | **Second:** | | |
| **Yes:** | **No:** | **Abstain:** | **Absent:** | **Recusal:** |

Please respond to the following sections below. We ask that you present your proposal to the Clean Energy Committee to answer further questions about your project. If your project is funded we require you to publicize your work, and provide the committee with documentation, and a final report.
• If you require more space, please submit any additional documentation with your application.

**Areas affected by proposed project:** The committee reserves the right to have grant proposal reviewed by an authorized representative from affected areas prior to full review. Please refer to the grant guidelines to see if your project requires authorizations. Contact cleanenergy@evergreen.edu if you have any questions. Be sure to give yourself enough time to communicate with staff and faculty before the deadline. When you receive authorization, type the name of the representative below. Authorization will be verified.

| **Affected Area** | | **Approval Required** | **Approval Received** |
|---|---|---|---|
| Faculty / Staff Sponsor | Anthony Tindill | Always | YES |
| Director of Facilities | | YES | YES |
| Environmental Health & Safety Officer | | YES | YES |
| Campus Land Use Committee | | YES | YES |
| Academic Budget Dean | | YES | NO |
| Student Activities Advisor | | | |
| Science Operations Manager / Organic Farm Manager | | | |
| Residential and Dining Services | | | |

**Timeline**
• Provide an estimated timeline listing the length of time from start to finish and detailing the length of time that each component will take.

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| **1. Design** | **Finished in Fall/Winter Quarters** | **4. Research / Construction** | **May 1st - June 4th** |
| **2. Approval** | **Completed in Winter Quarter & into Spring- Week 3** | **5. Present / Report** | **June 5th, 2012** |
| **3. Procurement** | **April 30th - May 14th** | **6. Follow-up** | **June 7th, 2012** |

**Detailed Project Description**

Please include:

- Project goals
- Definition of sustainability and the relationship of the project to this definition
- Longevity and/or permanence of the project results on campus
- Location, including any concerns that may arise from the chosen site
- Previous experience directing projects of this nature
- If applicable, comparisons to similar projects at other campuses

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| **Description** | **Over fall and winter quarter, as students of Light Step, we have researched methods of alternative energy and building design while focusing on community outreach opportunities. Our group of ten students has chosen to implement our knowledge of these fields through the construction of a sustainable rain shelter area near Parking Lot C. By interacting with the Director of Facilities and the Campus Land Use Committee, we have established a structure that meets county codes and safety standards. Through our research we have chosen materials that prove to be long lasting and require little to no maintenance.**<br><br>**The structure itself will be constructed out of timber and be secured on a concrete pillar foundation with permeable turfstone pavers. The poly carbonate roofing will have a portion cleared to house an artistic solar panel that we will be creating out of refuse solar cells. The solar cells will be placed between tempered glass and a clear resin material designed for shock resistance and weather proofing. This artistic solar panel is meant to inspire visitors, encouraging creative thought applied to alternative energy methods. An additional commercial grade solar array will be attached to the roof above this artistically lit display to guarantee optimal energy performance for the requested floodlights.**<br><br>**Underneath the structure will be a bench with cedar wood planks sealed with Ecoprocate--a sustainable coating, that will rest on refuse tires filled with gravel. At the front of the structure there will be a tire-garden wall. This wall will be constructed with refuse tires secured into the foundation with rebar and coated in an exterior stucco finish. The top tires will provide open spaces for potted plants to be placed. The plants we have chosen are resilient native species that are dormant in the summer and require no care.** |

**Campus Connections (Please select all that apply):**

| | Research | Implementation | Education |
|---|---|---|---|
| Renewable Energy | X | X | X |
| Resource Conservation | X | X | X |

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|---|---|---|---|
| Sustainability Strategies | X | X | x |

**Impact on Campus Sustainability Goals:**
**Energy, Environmental, Social and Economic Impact**
• How does your project align with the Climate Action Plan or the goal of zero waste and carbon neutrality by 2020?
• How is your project consistent with the mission of the Clean Energy Committee?

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| **Impact on Campus Sustainability** | **While our shelter provides light to this otherwise dimly lit area, it will produce its own energy through the solar powered arrays. Additionally we will be using refuse tires in the building of the bench and living wall structure as well as utilizing refuse solar cells as to reduce material landfill waste. The wood that we will be using will be coated in sustainable ecoprocolate to ensure longevity and the glass for the artistic solar display will be tempered and coated in a shock & weather resistant resin.**<br><br>**We believe the entire structure will be an inspiring commodity to the C parking lot and in a location that is frequently seen and used by students and visitors to the campus.** |

**Outreach and Education:**
The Clean Energy Committee strives to fund projects that will be highly visible and have a positive impact in the lives of the Evergreen students responsible for the clean energy initiative. Approved proposals will be required to publicize their project in press releases and/or presentations, including mention of sponsorship by the Clean Energy Committee. It is also expected that you will present your work at the Synergy Conference, the Science Carnival, or another public presentation approved by the committee. With that focus, please address the following:

- visibility of the project to students and the greater evergreen community
- role that students will play in the project
- opportunities for involvement in classroom curriculum
- media outreach opportunities
- any additional information on methods the project will use to educate and engage students and the public about clean energy technologies and resource conservation.

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| **Outreach and Education** | **As our shelter's location is set to be adjacent to Parking Lot C, it will be one of the first structures visible on campus. Through a QR code located on the structure, pedestrians will be able to access information concerning how the shelter was constructed, what building materials were used and how much energy is collected through the solar panels and the energy output of the lighting. We will be engaging both local and national press at the completion of our project in addition to a "ribbon-cutting" ceremony at the end of spring quarter.** |

**Budget and Fundraising**

Please include:

• A detailed budget for the full project costs, including initial costs and life-cycle operation and maintenance costs.

• Detail both the specific budget items and the total funding amount being requested, and include support documentation.

• If the Clean Energy Committee does not fund the full requested amount, will the project be able to move forward?

• List any grants or other sources of funding that have been obtained or applied for. If these funds are limited to a certain component of the project, please specify

• NOTE: Preference will be given to those projects that seek additional funding from other sources. This priority is given to encourage cost sharing and to allow the funds available to support a greater number of sustainability projects on campus.

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| **Budget** | **We have received a grant from the Student Activities Foundation for $1600 for the start-up costs of this project. This grant does not cover any of the costs applied to the tire-wall portion, the turfstone or the structural materials that support the roofing. This money has been allocated primarily for the bench and artistic solar display.**<br><br>**See additional attachment to this email for itemized budget list. These prices are less shipping and less tax, thus we have quoted our estimate at 20% higher than the total seen in budget.**<br><br>**Ken Tabbutt, Academic Budget Dean, has been away from office over the finalization of this budget and was not able to be reached, we are told that he is to return on May 7th.** |

**Cost Summary Including Tax**

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| Goods and Services | 9,900.18 |
| Equipment | Provided by school & students (Marycolleen Foley & Christopher Gerber) |
| Labor and Maintenance | Student driven |
| TOTAL PROJECT COST ESTIMATE | 11,880.22 |