

# Student Sustainability Council Meeting

## 21, September 2016

18:00 – Meeting begins with the reading of the preamble

18:02 – Introductions are made

18:05 – Light bulbs proposal begins with Ben Troupe presenting

18:15 – Presentation on the Light bulbs proposal ends

18:15 – Q&A on the Light bulbs proposal begins

18:25 – Motion to extend Q&A by five minutes (Ellen, William 2<sup>nd</sup>)

18:30 – Motion to extend Q&A by five minutes (William, Mitch 2<sup>nd</sup>)

18:36 - Motion to extend Q&A by two minutes (Ellen, William 2<sup>nd</sup>)

18:38 – Motion to extend discussion by two minutes (Ellen, Lauren 2<sup>nd</sup>)

18:42 – Discussion on the Light bulbs proposal begins

18:49 – Motion to vote on Light bulbs proposal (Rob, Julianna 2<sup>nd</sup>)

**Vote      Yes: 0              No: 16 (1 abstain)**

18:54 – Presentation on service to sustainability award begins

18:56 – Discussion on service to sustainability begins

18:59 – Motion to vote on GPA reduction for SSC scholarship to 3.3 (Ellen, Gabe 2<sup>nd</sup>)

**Vote      Yes: 17              No: 0**

19:00 – Motion to vote on SSC Scholarship as amended (Ellen, Mitch 2<sup>nd</sup>)

**Vote      Yes: 17              No: 0 (1 abstain)**

19:00 – Committee meeting updates begins with outreach

19:02 – Development committee update

-update on the significant changes (addition of amendments, and grammatical errors) to the SSC constitution.

19:03 – Motion to vote on Constitutional corrections (William, Gabe 2<sup>nd</sup>)

**Vote      Yes: 16      No: 0 (1 abstain)**

19:05 – Motion to adjourn meeting (William, Jerrod 2<sup>nd</sup>)

Name	Beginning	Ending
Shane Tedder	N	N
Ellen Green	Y	Y
Gabe Smith	Y	Y
Lauren Thomas	Y	Y
William Varney	Y	Y
Benjamin Troupe	Y	Y
Mitch Mullins	Y	Y
Rob Hanna	Y	Y
Grady Bryant	Y	Y
Ryan Lark	Y	Y
Jerrod Penn	Y	Y
Amanda Williams	Y	Y
Jennifer Taylor	Y	Y
Rachel Sunderlin	Y	Y
John Garlasco	Y	Y
Julianna Dantzer	Y	Y
Tara Hassinger	N	N
Taryn Pavain	N	N
Matthew Whisman	Y	Y
Rachel Cook	Y	Y
Hannah Penn	Y	Y

## University of Kentucky Student Sustainability Council 2016-2017 Grant Application

1. Name: Jesse Peltan
2. Email: [jesse.peltan@uky.edu](mailto:jesse.peltan@uky.edu)
3. UK Affiliation: Undergraduate Student
4. Proposed Project Title: 1,000 Bulbs – One Big Change
5. If applicable, please provide the sponsoring or overseeing organization. (e.g. the Office of Sustainability, Wildcat Wheels, the Dept. of Ag. Economics, etc.): Department of Philosophy, Department of Environmental Sustainability Studies
6. Total Amount Requested from the Council: \$4,700
7. Would you like to make a presentation to the Council before your proposal is reviewed?  
Yes
8. Please mark the primary and secondary focus areas of your project with a **1** and **2**, respectively.
  - Recycling:
  - Transportation:
  - Agriculture/Gardening:
  - Water:
  - Renewable Energy/  
Energy Conservation: 1
  - Climate Change:
  - Local Environment:
  - Behavioral Change:
  - Species Diversity/Conservation:
  - Other (Please Describe): Education 2
9. Please name any other project leaders:

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**Name: Jesse Peltan**

**Title & Department**

**Undergraduate Student: Mathematical Economics, Philosophy, Environmental Sustainability Studies**

**Project Role: Head Project Manager**

**Email: [jesse.peltan@uky.edu](mailto:jesse.peltan@uky.edu)**

**Name: Ben Troupe**

**Title & Department**

**Undergraduate student: Philosophy and Political Science**

**Project Role: Associate Project Manager**

**Email: [benjamin.troupe@uky.edu](mailto:benjamin.troupe@uky.edu)**

**Name: Bob Sandmeyer PhD.**

**Title & Department**

**Professor: Philosophy**

**Faculty: Department of Environmental Sustainability Studies**

**Project Role: Faculty Advisor**

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*Please note that any project leaders listed will be excused for closed discussion of their project proposal.*

10. Please describe the project, its goals, and how it contributes to UK student knowledge, attitudes & culture, or practices of the 3 pillars of sustainability (i.e. economic, environmental and social), including potential long term effects.

The goal of 1,000 Bulbs – One Big Change is to jump start UK’s transition to LED lighting. Over the lifetime of the bulbs, they will save the university approximately \$50,000 in energy costs. The lifetime savings of nearly 1,000,000 kWh will save an amount of carbon emissions equivalent to over two years of student commuting.

We understand the importance of economic viability when it comes to long term sustainability. Economically, 1,000 Bulbs – One Big Change gives sustainability on campus the best bang for its buck. If the bulbs are used for an average of 4 hours a day and replace mostly incandescent bulbs, they will save twice as much energy per year as phase 1 of the RGAN solar array produces. That’s at a cost of \$4,700 vs \$91,000. That’s just 1/40<sup>th</sup> the cost per ton of CO<sub>2</sub> saved. Kentucky Utilities offers a rebate program of \$5 per bulb for energy star certified bulbs. The bulbs used in this project would qualify for the rebate. Normally the rebate goes to the university, but I am working with Brittney Thompson from the Physical Plant Division on getting the potential \$5,000 rebate signed over to the SSC. Mrs. Thompson says that it is highly likely that the university will agree to this because the project is funded by the SSC. If this is the case, the SSC will make \$300 off of the project. If anything is economically compelling, it’s a project that pays you.

The environmental impact of this project is significant. At a fraction of the cost of other carbon saving measures, the project will offset the CO<sub>2</sub> equivalent of more than two years of student commuting. LED bulbs also contain no hazardous materials like CFL bulbs do. The lack of mercury is good news for our long term water supplies. As part of the project, we will collect and recycle the bulbs that these LED’s are replacing. Informational material will be printed out on recycled paper and all surveys will be given online in order to avoid waste. Reduction of peak electrical consumption has a far greater environmental impact than just the fuel not burned. Reducing energy consumption means that the power company doesn’t have to build more generating capacity. Extra generating capacity represents a huge embodied energy cost. Reducing power consumption helps avoid the need for more traditional power plants, and makes the transition to renewable energy more viable.

The “One Big Change” we want to make is social. Many faculty and staff members here at UK do not know how far LED’s have come in the past few years. Many have had negative experiences with energy efficient CFL bulbs or earlier LED bulbs. Some of these bulbs failed to deliver on their rated lifespans and provided a quality of light that was inferior to the incandescent bulbs they were used to. Some environmentally conscious professors are concerned about the mercury found in CFLs and as a consequence are still using incandescent bulbs despite their high energy consumption. There were some high quality LED bulbs a few years ago, but they cost between \$15 and \$50. The primary bulbs we are using now cost just \$3.60.

We aim to create positive experiences with LED lighting so that faculty and staff will choose to use LEDs in their own homes. The potential environmental benefit from that is far greater than 1,000 bulbs. In order to create those positive experiences, we have budgeted for high quality LED bulbs. You can find cheaper bulbs,

but those bulbs provide a lower quality of light and a shorter lifespan. We want our faculty and staff here at UK to see what LEDs are really capable of now. That's why the bulbs we've chosen are dimmable, have a color rendering index (a measure of the quality of light) above 90, low power consumption, and a lifespan of 25,000 hours. The bulbs will provide a quality of light that matches an incandescent bulb while using just 16% the energy and lasting 25-30 times as long. These bulbs will provide an energy savings between 30%-50% over CFLs while providing a much higher quality of light, lasting longer, and using no mercury or other hazardous materials. We have also budgeted for a small number of 3 way LED bulbs for use in 3 way fixtures. These bulbs are significantly more expensive, but they also show the versatility of LEDs. These 3 way bulbs cost 3 times as much as a 60w replacement, but they can replace a 100W or 150W 3 way bulb. \$12 may seem like a lot for a light bulb, but consider that at the university's rate of \$0.06/kWh the bulb will save \$120 in electricity over its 25,000 hour life.

Long term the aim of this project is to educate UK's faculty, staff, and students about LED lighting so that they will adopt the technology in their own homes and businesses. LED lighting is special because of just how economically compelling it is. The financial benefits will attract people who would not normally be passionate about sustainability. In the long term, this will help people seeking economic viability and sustainability see that environmental and economic sustainability are two sides of the same coin.

11. Name any anticipated project affiliates and describe the extent of their support, including any financial, matching or in-kind support. Specific details are encouraged.

Office of Sustainability and Physical Plant Division (\$0) data support, outreach support, general project advising

The Student Sustainability Council will be credited for 100% of the funding of the project. The project is a student initiative and the SSC will receive the highest portion of credit due to their large financial contribution, while the Office of Sustainability and Physical Plant Division will be noted as advisory affiliates.

12. Please mark the primary target population of your project with a 1.

- UK (general):1
- Undergraduates:1
- Graduates:1
- Community:
- Faculty: 1
- Other (Please Describe):

**In 250 words or less, please answer the following questions.**

13. Describe the intended University of Kentucky audiences and potential number of people impacted including any potential diverse segments such as student or community organizations and supporting evidence (e.g. expected or historical event/speaker attendance).

Faculty, staff, and students will benefit from exposure to LED usage. Faculty will learn through experience about the benefits of LED lighting. Our hope is that faculty and staff will have positive experiences with LED lighting and choose to purchase LED bulbs in their own homes. Students will be exposed to the high quality LED lighting when they visit professors in office hours. Ultimately the goal of this project is bigger than just 1,000 bulbs, kick starting UK's transition to LED lighting will inspire faculty, staff, and students to adopt sustainable practices. The One Big Change we will make with this project goes far beyond 1,000 light bulbs. By providing faculty, staff, and students with first hand experience of the benefits of LED lighting, they will go on to spread the word to their friends, families, churches, community centers, and businesses. Positive experiences with LED lighting will make those exposed more likely to support sustainable initiatives in the future. Students here at UK go all over the world in their careers. Providing them with positive experiences in sustainability can potentially impact decisions made all over the world.

14. Are there any students involved in the proposed project? If so, do they benefit from professional or technical skills, outputs, or experiences such as presentations, posters, or reports?

A design student will design an educational brochure. They will benefit from the work experience and the publicity. All students involved in the project will benefit from the work experience and from being involved with sustainability on campus. Experience implementing a project, collecting data, and publicizing it will provide all students involved with skills that will help propel them forward in their careers. Students involved will carry with them a passion for sustainability into their futures.

15. Please describe any previous history and to what extent you, other project leaders, or the sponsoring organization may have with the UK Student Sustainability Council.

Ben Troupe has served on the SSC for 1 year.

16. Please outline a timeline and milestones to ensure project efficacy prior to and after project implementation.

Date	
September 21, 2016	Funding Approved by SSC
September 22, 2016	Call for Design Student Applications
September 30, 2016	Selection of Student Designer
September 30- October 7, 2016	Order and Shipment of Bulbs
October 7, 2016	Design Due
October 8, 2016	Brochure Printing
October 10-14, 2016	Installation of Bulbs

April 14, 2017	Survey to participants released
April 21, 2017	Surveys due, gift card winners selected.
April 24, 2017	Gift Cards Delivered to offices

17. Does the success of your project require prior approval of other UK or non-UK entities (e.g. IRB or venue approval, etc.)? If so, please provide supporting documentation.  
no
18. Please demonstrate how the Student Sustainability Council will be credited or advertised in your project (this can include promotional material). Would a project leader be available for a radio interview?  
The Student Sustainability Council will be credited in a highly visible way in a paragraph in the brochure. In any media releases the SSC would be credited. Project Leaders would be available for interviews.
19. Using the following format, please provide a line item budget for the total amount request and what percent of the project is being sponsored by SSC funding. Provide information sources or reasoning for the budget estimates.

Description	\$ Total Cost	\$ Request from SSC	Source of remaining funds
700 60W eq LED bulbs @\$3.60/bulb	\$2,520	\$2,520	
250 40W eq LED bulbs @\$2.53/bulb	\$632.50	\$632.50	
50 3 way LED bulbs @\$11.95/bulb	\$597.50	\$597.50	
Student Designer- Educational Brochure	\$150	\$150	
Brochure Printing Costs (100% Recycled Paper)	\$600	\$600	
Gift Card Incentive to Local/Sustainable Restaurants	\$200	\$200	

[https://www.amazon.com/Feit-Electric-Replacement-CEOM60-927/dp/B01BJOY1MC/ref=pd\\_bxgy\\_60\\_img\\_2?ie=UTF8&psc=1&refRID=NVK3T1X2KY0BB87M9B4R](https://www.amazon.com/Feit-Electric-Replacement-CEOM60-927/dp/B01BJOY1MC/ref=pd_bxgy_60_img_2?ie=UTF8&psc=1&refRID=NVK3T1X2KY0BB87M9B4R)  
[https://www.amazon.com/Feit-Electric-2700K-Replaces-3-pack/dp/B01D2B5DW8/ref=pd\\_sim\\_60\\_2?ie=UTF8&psc=1&refRID=2AB289ZHYWFHPCKGJMVO](https://www.amazon.com/Feit-Electric-2700K-Replaces-3-pack/dp/B01D2B5DW8/ref=pd_sim_60_2?ie=UTF8&psc=1&refRID=2AB289ZHYWFHPCKGJMVO)

20. Are you willing to accept a general reduction in your budget?  
Yes
21. Are you willing to accept line item changes in your budget?  
Yes
22. You may include additional attachments to supplement the application such as promotional material, resumes, letters of collaborative funding, etc.

Submit project proposals and/or questions on proposal processes to [ukstudentsustainabilitycouncil@gmail.com](mailto:ukstudentsustainabilitycouncil@gmail.com) with 'SSC Proposal' as the subject line.

If successfully funded, a councilmember will be assigned to your project. Failure to communicate with this person can result in a total or partial loss of funding. **Any changes in the use of approved funding must be resubmitted and re-approved by the Council. Unused funds are automatically returned to the SSC.**

Project proposals will be considered on a rolling basis and must be received 1 week prior a scheduled meeting in order to be considered for the agenda. If SSC and applicant are able to confirm that project, if funded, would be in compliance with University Business Procedures. The Fall 2016 meeting schedule is listed below:

Meeting date	Proposal due date
August 23, 2016	August 16, 2016
September 7, 2016	August 31, 2016
September 21, 2016	September 14, 2016
October 5, 2016	September 28, 2016
October 19, 2016	October 12, 2016





## ***Service to Sustainability Award***

### **Purpose**

The Student Sustainability Council supports the use of renewable energy from solar photovoltaic installations at the University of Kentucky, which creates immediate, financial benefits and more importantly, reduced pollution, benefitting all Kentuckians. This scholarship represents these benefits and serves to acknowledge students who have demonstrated an exceptional commitment to sustainability at the University of Kentucky. Two such students will each be awarded with a one-time \$1250 scholarship in Fall 2016.

### **Applicant Requirements**

- Demonstrate interest in renewable energy and sustainability, either as a career or as a student.
- Enrolled at UK at least one academic year prior to applying
- Have full-time student status
- Be graduating no earlier than Spring 2017.
- Be involved in at least one campus organization.
- Have a minimum, cumulative 3.5 GPA

### **Instructions**

By no later than 12pm on Monday, March 18, 2016, please submit the following material to [ukstudentsustainabilitycouncil@gmail.com](mailto:ukstudentsustainabilitycouncil@gmail.com).

- Application
- An unofficial transcript
- A resume or curriculum vitae

### **Selection Process**

Two scholarship recipients will be selected by the President's Sustainability Advisory Committee (PSAC) based on academic success and efforts towards renewable energy and sustainability at the University of Kentucky. Those unable to meet applicant requirements or submit required application materials will be excused from consideration.

# Application

Name:

Student ID#:

Campus Address:

Primary Phone:

Primary email:

Major:

College:

Classification:

Cumulative Credit Hours earned:

GPA:

## **Efforts in Renewable Energy/Sustainability**

List all activities or related organizations you have had related to renewable energy/sustainability work experience you have had while at the University of Kentucky. Please describe the extent of your involvement such as leadership in such activities or organizations or any non-academic awards or honors you have received as part of your involvement.

## **Essay**

Please write a short essay (500 words or less) that explains how your leadership has contributed to sustainability at the University of Kentucky or why you should be selected to win this award.