

Student Sustainability Council Meeting

5, October 2016

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

18:02 – Introductions are made

18:04 – Previous meetings meeting minutes are reviewed

18:05 – Formula Kentucky begins their presentation

18:09 – Formula Kentucky completes their presentation

18:09 – Q&A session for Formula Kentucky presentation begins

18:13 - Q&A session for Formula Kentucky presentation ends

18:14- Solar car begins their presentation

18:21 – Solar car ends their presentation

18:21 – Q&A session for Solar car begins

18:26 – Q&A session for solar car ends

18:27 – DOPE begins their presentation

18:33 – DOPE presentation ends

18:34 – Q&A session for DOPE presentation begins

18:38 – Q&A session for DOPE presentation ends

18:40 – 1,000 light bulbs presentation begins

18:44 – 1,000 light bulbs presentation ends

18:45 – Q&A session for 1,000 light bulbs beings

18:50 – Q&A session for 1,000 light bulbs ends

18:51 – Discussion for Formula Kentucky presentation begins

19:01 – Motion to amend line item (Ben, Amanda 2nd)

Vote Yes: 17 No: 0 (1 abstain)

- Amendment: As a part of the decals of the car, an E-85 symbol or logo must be in place to visibly confirm that the car is powered by E-85

19:02 – Motion to extend discussion by 2 minutes

19:04 – Motion to vote as amended (Ellen, Jerrod 2nd)

Vote Yes: 11 No: 8

19:05 – Discussion on Solar Car presentation begins

19:13 – Motion to amend solar car budget (Mitch, Julianna 2nd)

Vote Yes: 18 No: 0

- Amendment: the SSC will contribute \$10,000

19:14 – Motion to vote on the solar car presentation as amended (Lauren, Jerrod 2nd)

Vote Yes: 19 No: 0

19:15 – Discussion on DOPE presentation begins

19:25 – Motion to extend discussion (Ellen, Gabe 2nd)

19:27 – Motion to vote on DOPE conference

Vote Yes: 18 No: 0 (1 abstain)

19:27 – Discussion on 1,000 light bulbs presentation begins

19:37 - Motion to extend discussion by two minutes (William, Gabe 2nd)

19:39 – Motion to extend discussion by two minutes (Ellen, William 2nd)

19:40 – Motion to amended 1,000 light bulbs presentation

Vote Yes: 17 No: 1

-Amendment: The SSC will fund the first phase of the project, the second phases funding is contingent on the success of the first phase. The SSC asks that PPD use the rebate money in an effort to continue the funding of LED bulbs on campus.

19:41 – Motion to vote on 1,000 light bulb proposal as amended

Vote Yes: 18 No: 0 (1 abstain)

19:41 – Outreach committee updates the council

19:43 – Development committee updates the council

19:45 – At large seat member application open

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	Y	Y
Taryn Pavain	Y	Y
Matthew Whisman	N	N
Rachel Cook	Y	Y
Hannah Penn	Y	Y

University of Kentucky Student Sustainability Council 2016-2017 Grant Application

1. Name: Matthew Wetherell
2. Email: matthew.wetherell@uky.edu
3. UK Affiliation: Student
4. Proposed Project Title: Formula Kentucky, UK Formula SAE Vehicle Project
5. If applicable, please provide the sponsoring or overseeing organization. (e.g. the Office of Sustainability, Wildcat Wheels, the Dept. of Ag. Economics, etc.): N/a
6. Total Amount Requested from the Council: \$5,924
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: • Climate Change:
 - Transportation: **1** • Local Environment: • Agriculture/Gardening: • Behavioral Change:
 - Water: • Species Diversity/Conservation:
 - Renewable Energy/ • Other (Please Describe):
Energy Conservation: **2**

9. Please name any other project leaders:

Name	Will Adams
Title & Department	Engineer Associate Senior, Biosystems & Agricultural Engineering
Project Role	Advisor
Email	wcadam2@uky.edu

Name	Kaveh Tagavi
Title & Department	Professor, Mechanical Engineering
Project Role	Advisor
Email	kaveh.tagavi@uky.edu

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.

Formula Kentucky is a student organization which operates under the Society of Automotive Engineers (SAE). We design, engineer, and build an open-wheeled racecar every year, then compete against ~120 other student teams from around the world.

We strive to educate ourselves and our peers on engineering excellence in the hope that we create the next generation of elite engineers – The ones who will be building the automobiles of the future.

Currently, the Formula Kentucky racecar uses conventional gasoline as fuel. For our next generation vehicle, we would like to convert to E85, a renewable bio-fuel. This project will have three main benefits:

- 1. Educates UK students on how to design and build cars to use emerging fuel technologies.**
- 2. Promotes Environmental Responsibility and Sustainability in racing to racing enthusiasts, UK students, and k-12 students.**
- 3. Increases the power output of the competition vehicle.**

Updated 8/24/16

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.

To cover the total budget of the team for the 2016-2017 year, Formula Kentucky has received or expects support from the following entities:

- 1. UK College of Engineering – \$2500**
- 2. UK Alumni Association – \$2500**
- 3. Ultimate Street Car Association (USCA) – \$1000**
- 4. Harbor Steel & Supply Inc. – Frame and chassis materials**
- 5. Cummins Inc. – \$500**

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

- | | |
|-------------------|----------------------------|
| • UK (general): | • Community: |
| • Undergraduates: | • Faculty: |
| 1 • Graduates: | • 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).

Within the University of Kentucky, our intended audience is primarily undergraduate students. We expect to promote renewable energy, bio-fuels, and sustainable engineering to roughly 2500 people within 1 year of the project being completed, coming from 3 main events:

- 1. UK E-day -- ~300 People**

Updated 9/19/16

2. **UK Freshman Engineering Orientation – ~ 200 People**
3. **Campus Ruckus -- ~2000 people**

Formula Kentucky will be attending these events and promoting sustainability, renewable energy, and sustainable engineering by showcasing the vehicle along with posters/displays which provide details on the project.

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?

There are approximately 30 students involved in the Formula Kentucky project. The ~30 students involved in the project would develop skills in engineering and knowledge of renewable energy and bio-fuels such as E85. When they graduate they will then be able to use the knowledge and skills gained from their experience on the FSAE team to engineer the next generation of sustainable automotive technology.

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.

To our knowledge, Formula Kentucky has no history with the UK Student Sustainability Council.

Updated 8/24/16

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

**November 14th – Finalize Powertrain Design
December 14th – All components required are purchased
January 30th – Powertrain system assembled, mounted, and running
May 10th – 13th – FSAE competition at Michigan International Speedway**

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 approval of our project is required.

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 would receive a decal on the bodywork of the current vehicle for at least one year after the Council makes a contribution. The Council would also be featured on Formula Kentucky's university-hosted webpage (www.sae.engineering.uky.edu) and would be recognized on Formula Kentucky's social media pages including Facebook and Instagram. Any project leader would be available for a radio interview.

Updated 9/19/16

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
2009+ Honda CBR600 RR Powertrain	\$2,000	\$2,000	N/a
Haltech Elite 1500 ECU HT-150904	\$1,800	\$1,800	N/a
Haltech IQ3 Logger Dash HT-060101	\$1,699	\$1,699	N/a
Honda CBR1000 RR Fuel Pump	\$125	\$125	N/a
4x Honda CBR1000 RR Fuel Injectors	\$100	\$100	N/a
E85 Compatible Fuel Lines and Fittings	\$200	\$200	N/a
Total	\$5,924	\$5,924	

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.

Additional information is attached.

Submit project proposals and/or questions on proposal processes to

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:

Updated 8/24/16

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

Updated 9/19/16

University of Kentucky Student Sustainability Council 2016-2017 Grant Application

1. Name: **Monon Rahman**
2. Email: **mononr@gmail.com**
3. UK Affiliation: **University of Kentucky Solar Car Team** (solarcar@engr.uky.edu)
4. Proposed Project Title: **University of Kentucky's Solar Car Project - Gato Del Sol**
5. If applicable, please provide the sponsoring or overseeing organization. (e.g. the Office of Sustainability, Wildcat Wheels, the Dept. of Ag. Economics, etc.): **University of Kentucky College of Engineering**
6. Total Amount Requested from the Council: **\$16,500**
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.

- | | |
|---|--|
| <ul style="list-style-type: none"> • Recycling: • Transportation: 2 • Agriculture/Gardening: • Water: • Renewable Energy/
Energy Conservation: 1 | <ul style="list-style-type: none"> • Climate Change: • Local Environment: • Behavioral Change: • Species Diversity/Conservation: • Other (Please Describe): |
|---|--|

9. Please name any other project leaders:

Name	Senait Nuguse
Title & Department	University of Kentucky Solar Car Team Manager
Project Role	Oversees and manages the team and the logistics necessary to maintaining a competitive team and successful student organization.
Email	s.nuguse@uky.edu

Name	Chris Heintz
Title & Department	University of Kentucky Solar Car Engineering Lead
Project Role	Heads the design and manufacturing process for newer generation vehicles while contributing leadership to other facets of the organization.
Email	c.heintz.357@gmail.com

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.

Our mission as the University of Kentucky Solar Car Team is to design, manufacture, and race competitive solar vehicles while providing our engineers and multi-disciplinary members with much needed hands on experience outside of their demanding course load. Additionally, UK Solar Car always strives to contribute to STEM outreach in the local Bluegrass region. In relation to the three pillars of sustainability, our economic goals revolve around being able to garner the appropriate funding in order to continue to push our team to more competitive levels. Environmentally, we wish to help train our engineers and members to the best of their abilities so that they can make a positive impact with renewable energy initiatives moving forwards in their careers. In a social and communal sense, our team wishes promote our love of STEM while inspiring and training some of the University's and nation's future leaders.

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.

Our team is typically funded by organizations within the University of Kentucky, local Bluegrass businesses, and some corporate organizations. We typically receive monetary donations so that we can purchase the materials and parts that we desire, but we have also received in-kind donations of materials when constructing our solar vehicles. In order to raise these funds, team members approach businesses in order to maintain mutual relations for both public exposure and to offer promotional incentive for any generous contributions made. We offer incentives by showing our appreciation through our media channels, encompassing everything from shout outs on social networking to offering real estate on the sponsorship page of our team's website, vehicle and trailer. In addition to businesses, individuals who make donations to our organization have the opportunity to have their name and hyperlink placed on our supporters page of the website.

This past year, we have received funding from organizations such as the Power and Energy Institute of Kentucky, UK Spark Laboratory, Altec, Cummins, Society of Women's Engineers, and the Student Sustainability Council. Last year, SSC funded us with \$8,000, which greatly helped us with purchasing materials and preparing for last season's races.

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

- UK (general): **1**
- Undergraduates:
- Graduates:
- Community:
- Faculty:
- 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).

In terms of affairs with the University, we work hard to maintain relationships with our advisors and affiliates within the College of Engineering. Our target audience for recruitment will forever remain the student body. As a growing organization on campus, it would be unwise to turn away any willing and sincerely interested potential members. In order to become a well-rounded organization it is essential that we encompass any and all perspectives in order to accomplish our team's goals.

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?

The UK Solar Car Team is completely managed by students; everything from the design process to maintaining University relations is all performed by active members on the team. Everyone involved gains much hands on experience within their field of study. Depending on the projects, new and established members learn skills from soldering and welding to team-work and communication. The experience gained far exceeds the practical experience gained through the curriculum, as even JB Straubel, CTO of Tesla Motors said: "Solar Car matters more than most classes you take... At Tesla we place it higher than GPA".

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.

Last year, we were very fortunate to have the Student Sustainability Council fund us with \$8,000. This greatly helped us, as developing solar vehicles can become quite expensive. Having financial support from organizations such as the SSC helps us achieve our goals for the future.

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

As we have completed our 2016 race season, the team is now preparing for construction of the next vehicle, Gato Del Sol VI. Gato Del Sol VI will be developed on a two year design cycle. While it is being developed, the team will also continue maintaining our current car, Gato Del Sol V, for next year's race and will use it to test various systems and components for VI.

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.

In order to compete in both the Formula Sun Grand Prix and the American Solar Challenge (the two races that UK Solar Car participates in), the solar vehicle must comply with the regulations that officials provide beforehand; these regulations are given typically a year or two before the actual event. Team members design and manufacture the car with respect to the regulations and get it pre-approved by the race officials. Specific regulations can be found here: <http://americansolarchallenge.org/regulations/>

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?

We will continue to put SSC's logo on our t-shirts, car, and trailer. When presenting our team and our supporters to others, the SSC's contributions will be mentioned. Project leaders will be available for a radio interview.

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
New Motor (i.e. NGM SCM150)	\$16,500	\$16,500	N/A

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?
22. You may include additional attachments to supplement the application such as promotional material, resumes, letters of collaborative funding, etc.

Attached is a PDF that is similar to what we will present. Additionally, our media links are:

Facebook: www.facebook.com/UKSolarCar

Website: www.uksolarcar.com

Twitter/Instagram/YouTube: @uksolarcar

Submit project proposals and/or questions on proposal processes to 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 on the following page.

Fall 2016 Meeting Schedule

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
November 2, 2016	October 26, 2016
November 16, 2016	November 9, 2016
December 7, 2016	November 30, 2016

University of Kentucky Student Sustainability Council 2016-2017 Grant Application

23. Name: M. Ruth Dike, UKPEWG Treasurer
 24. Email: mruthdike@uky.edu
 25. UK Affiliation: PhD Student, Anthropology Department
 26. Proposed Project Title: Dimensions of Political Ecology 2017 Conference
 27. If applicable, please provide the sponsoring or overseeing organization. (e.g. the Office of Sustainability, Wildcat Wheels, the Dept. of Ag. Economics, etc.): University of Kentucky Political Ecology Working Group (UK-PEWG) and the Department of Geography
 28. Total Amount Requested from the Council: \$10,871
 29. Would you like to make a presentation to the Council before your proposal is reviewed? Yes
 30. Please mark the primary and secondary focus areas of your project with a **1** and **2**, respectively.

- | | |
|---|---|
| <ul style="list-style-type: none"> • Recycling: • Transportation: 2 • Agriculture/Gardening: 2 • Water: 2 • Renewable Energy/
Energy Conservation: 2 • Climate Change: 2 • Local Environment: • Behavioral Change: • Species Diversity/Conservation: 2 | <ul style="list-style-type: none"> • Other (Please Describe): Dimensions of Political Ecology is an annual, internationally renowned conference that attracts both emerging and established academic scholars and activists from around the world. The conference includes paper sessions, panel presentations, and workshops that explore nearly all of the focus areas established by the SSC, including: Agriculture, Climate Change, Conservation, Energy, Transportation, Water, and more. |
|---|---|

31. Please name any other project leaders:

Name: Thomas Grubbs
Title & Department: MA Student, Geography
Project Role: DOPE Conference Co-Chair
Email: thomas.grubbs@uky.edu
Name: Dayton Starnes
Title & Department: PhD Student, Anthropology
Project Role: DOPE Conference Co-Chair
Email: dayton.starnes2@uky.edu

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

32. 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 field of **political ecology** aspires to investigate how the three pillars of sustainability interact with one another, and seeks to bring to light the hidden processes that contribute to the success or failure of sustainability initiatives. In asserting the interrelatedness of humans and the environments of which we are a part, political ecologists aim to denaturalize, historicize, and politicize the social processes and relations underlying the production of unequal environmental and economic conditions, which are too often treated as natural outcomes by ostensibly apolitical observers. Political ecology blurs disciplinary boundaries and complicates the relationship between scholarship and

activism; indeed, it treats intellectual and political activities as inextricably connected.

For the past six years, the **University of Kentucky Political Ecology Working Group (UKPEWG)** has organized an annual conference known as **Dimensions of Political Ecology (DOPE)**. Now in our seventh year, this student-organized conference has grown from humble origins as a public presentation of seminar papers to a well-regarded conference that draws international participation from many top scholars, while also providing a much-needed space for engagement by community-based practitioners and young graduate and undergraduate scholars. The conference, which will take place from **February 23-25, 2017**, represents an unparalleled opportunity for University of Kentucky (UK) students and faculty to connect with top scholars and fellow students from across the globe in an intimate conference setting wherein key long-term professional relationships are able to be forged.

We are excited to announce that we have already confirmed the participation of several preeminent scholars in the field of political ecology for the seventh annual DOPE conference, including a **plenary panel** made up of three nationally recognized scholars: **Dr. J. Peter Brosius** is a Distinguished Research Professor in the Department of Anthropology at the University of Georgia and the founder of UGA's Center for Integrative Conservation Research. A leading scholar on the political ecology of conservation, he has been at the forefront of efforts to transform the field of environmental anthropology and is widely recognized as an authority on the Penan hunter-gather peoples in Malaysian Borneo; **Dr. Juanita Sundberg** is an associate professor in the Department of Geography at the University of British Columbia and the 2014 recipient of the Glenda Laws Award for her commitment to seeking social justice through her work. Focusing on issues of nature conservation, border security, and militarization, her work seeks to foster conversations between feminist geopolitics, critical race theory, posthumanism, political ecology, and Latin American Studies; **Dr. Nancy Lee Peluso** is a 2006 John Simon Guggenheim Fellow and the Henry J. Vaux Distinguished Professor of Forest Policy in the Department of Environmental Science, Policy, and Management at the University of California, Berkeley. Since the 1980's, her research has focused on forest politics and agrarian change in Southeast Asia, primarily in Indonesia, and addresses questions of property rights and access to resources, histories of land use change, and agrarian and environmental violence. The moderator for this year's plenary panel is **Dr. Betsy A. Beymer-Farris**, an Assistant Professor of Geography at the University of Kentucky and an affiliated faculty member with the university's Environmental and Sustainability Studies Program. Dr. Beymer-Farris, who is also a Visiting Associate Professor in the Department of International Environment and Development Studies at the Norwegian University of Life Sciences, has more than 14 years of experience working in Tanzania where she conducts research on "sustainably utilized" landscapes, (re)conceptualizing social-ecological resilience, gender and the environment, environmental policies and human rights, agro-food commodity chains, carbon forestry, and tropical resource management and conservation.

We are also pleased to announce that our **keynote speaker** for the 2017 conference will be **Dr. Sandra Harding**. Dr. Harding is a Distinguished Professor Emeritus of Education and Gender Studies in the UCLA Graduate School of Education & Information Studies, a Distinguished Affiliate Professor of Philosophy at Michigan State University, and the former director of the Center for the Study of Women at UCLA. Her teaching and research interests include feminist and postcolonial theory, epistemology, research methodology, and philosophy of science. Dr. Harding is the editor or author of 12 books, including *The Science Question in Feminism* (1986), *Whose Science? Whose Knowledge?* (1991), *Is Science Multicultural?* (1998), and *Science and Social Inequality* (2006). In 2013, she was honored with the John Desmond Bernal Prize, the highest honor given by the Society for the Social Studies of Science. The award is given annually in recognition of an individual who has made outstanding contributions to social studies of science.

Finally, we are excited to announce that **Dr. Paul Robbins** will be delivering the **welcome address** for this year's conference. One of the most recognized scholars in the field of Political Ecology, Dr. Robbins is the director of the Nelson Institute for Environmental Studies at the University of Wisconsin-Madison, where he guides the institute in serving as a world leader in addressing rapid global environmental change. His research addresses questions spanning conservation conflicts, urban ecology, and environment and health interactions. With writing focused on diverse interdisciplinary audiences and the broader public, he is author of the foundational textbook *Political Ecology: A Critical Introduction* and numerous research articles in publications that address conservation science, social science, and the humanities. His award-winning book *Lawn People: How Grasses, Weeds, and Chemicals Make Us Who We Are* is widely recognized as one of the most accessible books on the environmental politics of daily life. Because Dr. Robbins is such an engaging and accessible speaker, we plan to promote this event heavily to UK undergraduates through promotional posters and by contacting professors teaching political ecology-related coursework.

Along with hosting prominent speakers, the conference is dedicated to providing an important platform for undergraduates, graduates, and faculty to share original research and to receive feedback from both peers and leaders in their respective fields. This is achieved through the organization of dozens of paper sessions, which are typically comprised of four individual presentations followed by time for questions, comments, and discussion generated by the audience. In addition, we have a strong commitment to continuing engagement beyond the academy by organizing field trips for our participants to interact with community based organizations, and the active integration of practitioners into our conference sessions and activities.

Thanks to the past support of the SSC, we have provided an innovative **scholar-activist panel** for the last four years that highlights the ways in which our academic institutions can become more relevant and connected to our communities. Building on the success of DOPE 2016's scholar/activist panel, "Consuming & Critiquing Gentrification," DOPE 2017 will feature a panel focused on the intersection of resource extraction, land rights, environmental degradation, and activism. Pending funding, we wish to invite four social justice advocates who have been at the forefront of recent environmental battles (including the project to halt the Bluegrass Pipeline) in the state of Kentucky as well as two scholars at the University of Kentucky whose work engages with these local instances of activism: **Dr. Shannon Elizabeth Bell**, an Associate Professor of Sociology and Core Faculty Member in the University's Environmental and Sustainability Studies program, and **Dr. Ann Kingsolver**, a Professor of Anthropology and the former director of the UK Appalachian Center.

By bringing together top political ecologists from across numerous theoretical and practical dimensions, we expose UK (and non-UK) students to new ideas, methods, and subjects of study and action related to sustainability.

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

The Department of Geography provides in-kind support by allowing us to work with their department administrator to track and manage our funds. In addition to the SSC, we are currently seeking contributions from the following entities which have provided support in the past: the Vice President of Research; the College of Arts and Sciences; the Student Government Association; the Departments of Anthropology, Geography, Forestry, and Sociology; and the Appalachian Center.

We hope to continue those funding relationships this year, as well as establish new ones with: the Committee for

Social Theory, Gender and Women's Studies, and the departments of Environmental Sciences, Economics, Plant and Soil Sciences, and Biology. This attempt to diversify our sources of funding reflects the impressive growth of the conference, as well as our attempt to become less reliant on any one organization, such as the SSC, to fund such a large proportion of the conference. However, changes in the financial structure of the University in the past year have resulted in drastic reductions in available funding through the College of Arts and Sciences. As such, we do continue to heavily rely on the SSC as a key funding partner in supporting this important and well-respected conference.

Nevertheless, it is a long-term goal for DOPE to become more financially self-sufficient, while still retaining our accessibility since that is a critical component of the diversity and broad-based engagement that are hallmarks of the conference. With this in mind, and thanks to advice offered by the SSC, we raised our fees from \$20 for graduate students and \$40 for faculty to \$35 and \$70, respectively, in 2016. This year, in anticipation of further budget cuts, we are again raising our registration fees to \$45 for graduate students and \$90 for faculty. We will also begin charging UK faculty registration fees to attend the conference. Increasing our internal revenues (from registration fees) allows us to keep registration free for undergraduate students, a goal which we are thoroughly committed to. Any excess revenue generated through registration fees is reinvested into campus-based UKPEWG activities during the academic year. UKPEWG events target undergraduate and graduate students alike and have included the political ecology film series and brown bag lunch series for invited speakers to present their work and network with students.

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

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

Other: The DOPE 2017 conference will attract an interdisciplinary audience of scholars and practitioners who work in the field of political ecology, meaning that the primary target population of our project is comprised of undergraduates, graduates, and faculty from UK and other leading universities from around the world, as well as community members from the Bluegrass and beyond. This intended audience includes a broad swath of disciplines and professions, ranging from the natural and social sciences, government agencies, non-profits, and activist organizations. We make an active effort to provide a wide range of programming that is capable of attracting the interest and participation of those new to the field of political ecology, seasoned veterans whose innovative work pushes boundaries and advances the field, and everyone in between who shares a passion for contributing to the construction of social, political, and ecological futures that are more just and sustainable for all.

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

35. 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).

Our intended UK audiences include undergraduates, graduates, and faculty members interested in the broad field of political ecology. Most noticeably, this includes the “core” disciplines that contribute to political ecology: Anthropology, Geography, and Sociology. It also extends to programs in such diverse fields as: Appalachian Studies; Ecology and Evolutionary Biology; Environmental Studies; Forestry; Gender and Women’s Studies; International Studies; Philosophy; Political Science; and Sustainable Agriculture. We engage in active outreach to these groups by connecting with their professors, departments, and student associations through personal emails, campus listservs, and actively recruiting at University events.

The DOPE 2016 Conference was a huge success, drawing over 300 scholars, environmental professionals, and activists—both local and from as far away as China. Our Political Ecology (PE) 101 sessions were extremely well attended, and drew over 30 UK undergraduates from departments such as Community Leadership and Development and Nursing. Our special conference track: Ecologies of Food, Agriculture, and Justice was well received, and increased involvement from UK students. Of the 390 conference registrants, 69 were faculty (23 from UK), 223 were graduate students (45 from UK), 6 were non-academic professionals and activists, and 93 were undergraduate students (69 from UK). A total of 114 UK students benefitted from free admission to the conference in addition to 23 UK faculty members. As registration was not technically required for UK undergraduates or graduate students to attend the conference or PE 101 sessions, we estimate that attendance numbers from this subset are higher than these values indicate.

36. 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?

As an entirely student-run conference, a multidisciplinary group of graduate students (both

masters and PhD level) are involved in and benefit from planning and participating in this project. Professional development in conference planning, grant writing, and session organizing are among the most obvious benefits to our members. Additionally, we recruit undergraduate volunteers who gain invaluable behind-the-scenes knowledge of running a conference.

Many undergraduates have found DOPE to be a low-stress environment for learning about the field of political ecology and how to present and participate in academic conferences more generally. We encourage student participation with free conference attendance for undergraduate students and by organizing an Undergraduate Student Symposium embedded within the conference structure. We feel that this subsidized attendance structure reflects a commitment to the facilitation of student involvement in the conference. In order to further incentivize participation, we also host an Undergraduate Student Paper Competition in order to reward exemplary undergraduate scholarship. We will also reach out to Dr. Pat Whitlow in the Office of Undergraduate Research and professors teaching Political Ecology-related courses to encourage participation in the conference and paper competition.

In addition, we also organize a special undergraduate luncheon on the first day of the conference to foster connections and solidarity amongst undergraduate scholars, providing a warm and unimimidating welcome for students. We maintain a strong commitment to undergraduate engagement and look forward to even greater participation of undergraduate students this year as we continue the symposium, luncheon, paper completion, and specific networking opportunities for undergraduate participants.

37. 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.

The UK Student Sustainability Council has played a central role in the growth and success of this conference since its inception. Through the SSC's support we have been able to build a conference with a loyal and growing following, bring internationally regarded scholars to speak on our campus, and develop an innovative scholar-activist panel series that integrates the much needed perspectives of community members and non-academic practitioners into the conference. In addition, the SSC has also supported and guided us in integrating meaningful undergraduate engagement into the conference structure, a feature of the conference that we are very proud of.

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

Our conference organizing committee has been meeting regularly since last April, and all of the key logistics of the conference are already in place. We have secured commitments from our keynote speaker and plenary panelists, begun to reserve spaces in The 90 and additional locations for the conference weekend, and released a call for papers. Online conference registration available through the HIVE will open during the first week of October.

Our next key step involves finalizing the participants in the scholar-activist panel (completed by the end of November 2016 and pending SSC funding). Other remaining tasks include finalizing travel logistics for invited speakers (completed by December 2016), securing funding from other UK sources (completed by December 2016), and the routine logistics of organizing papers into

sessions and running the day to day logistics of the conference (completed by February 2017). As a result of increased institutional memory and organizational capacity, all of these tasks are familiar to us, and therefore we are confident in our ability to complete them in a timely fashion.

39. 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.

The success of our project does not require any prior approval from UK or non-UK entities.

40. 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 as a key sponsor of the DOPE conference on all promotional material. We plan to use a portion of the funds given by the SSC for having new directional signage and promotional posters made in an effort to increase the conference's visibility to undergraduate and graduate students on campus and better direct them to the various conference locations. We hope that by increasing our campus-wide advertising of the conference through new signage, we can greatly increase the number of UK students and faculty that attend DOPE 2017.

41. 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.

We are requesting \$10,871, which amounts to about 43 percent of the DOPE 2017 Conference being sponsored by SSC funding. Please see the attached line item budget for an explanation of our estimates.

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

Please see below for images of the UKPEWG/DOPE website (www.politicaledgeology.org) and our call for sessions.

Home / About Us / DOPE 2017 / Archives /

POLITICAL ECOLOGY

Dimensions of Political Ecology 2017: February 23-26

WORKING GROUP

DOPE 2017
February 23-26, 2017

University of Kentucky
Lexington, Kentucky

f t v

Bringing together an international community of scholars, students, environmental professionals, and activists.

The Political Ecology Working Group (PEWG) is an interdisciplinary group of graduate students at the University of Kentucky, who organize and host the annual Dimensions of Political Ecology (DOPE) Conference. Since its inception in 2010, this student-organized conference has become one of the largest, most highly-regarded international forums for critical discussions at the intersection of ecology, political economy, and science studies. DOPE 2016 welcomed more than 300 scholars, environmental professionals, and activists from over 100 institutions to Lexington. The DOPE Conference has offered a platform for both established and emerging scholars, featuring invited speakers such as Paul Robbins, Rebecca Lave, Erik Swyngedouw, Vandana Shiva, Julie Guthman, Laura Pulido, and Kim Tallbear.

**Dimensions of Political Ecology Conference
February 24 – 25, 2017**

University of Kentucky | Lexington, Kentucky, USA

The University of Kentucky Political Ecology Working Group invites you to participate in the seventh annual Dimensions of Political Ecology Conference (DOPE) February 24-25, 2017, in Lexington, Kentucky, USA. DOPE has become a key international forum for graduate students and faculty at all stages in their careers, fostering critical interdisciplinary discussion of urgent topics including: rural social movements; food systems; complexity in ecological and social systems; decolonization, knowledge, and difference; science and technology studies; neoliberal natures and climate justice; and feminist political ecologies, among many more. Over 300 scholars, activists, and environmental professionals attended

DOPE 2016, representing dozens of disciplines and more than 100 institutions spread over four continents.

We encourage you to contribute to the intellectual vitality and continued success of the conference by organizing a session for DOPE 2017. The conference is open to any topical, theoretical, or methodological framework that brings together scholarship on the ecological dimensions of political, social, and economic research, as well as the social aspects of natural sciences.

The DOPE organizing collective is thrilled to announce two of this year's featured speakers:

Keynote Speaker: **Dr. Sandra Harding** (UCLA Distinguished Professor Emeritus of Education and Gender Studies and Michigan State University Distinguished Affiliate Professor of Philosophy).

Welcome Address: **Dr. Paul Robbins** (UW-Madison Nelson Institute for Environmental Studies: Director).

Call for Organized Sessions

The DOPE Organizers ***strongly encourage participants to organize their own sessions, or to join sessions organized by other participants***, rather than submit individual 'orphan' papers. To organize your own session, please:

1. Draft a Call for Papers (CFP). For guidance, reference the wide variety of CFPs from previous DOPE conferences, available via our [website](#).
2. Email your CFP to the DOPE Organizers at ukpewg@gmail.com. You should distribute it among your colleagues and to relevant listservs.
3. Conference registration will open in October 2016. All participants in your session must have registered and paid by the final registration deadline (**December 1, 2016**). As such, we suggest that you establish a session deadline of **November 24** or earlier.
4. After you have submitted your call, we will send you a Google Form that you will have to complete. This will confirm the final composition of your panel, including participants' names, institutions, abstracts (300 word limit), titles, keywords, discussants, organizers, chairs, and other relevant information. We will ask that you be as detailed as possible and send this information before the final registration deadline (**December 1, 2016**).

Guidelines and Suggestions for Session Organizers

- When planning, remember that each session is 100 minutes long, and we strictly limit organizers to two session slots.
- While we welcome conventional paper sessions, we also encourage organizers to consider workshops, panel discussions, lightning talks, or other session styles.

- Each DOPE participant may present in one session, and also serve as a discussant or panelist in ONE additional session. We ask that participants limit themselves to two conference activities.
- Undergraduate students are asked to submit their papers to our Annual Undergraduate Symposium.

Individual Abstracts

We strongly encourage participants to submit abstracts in response to CFPs being circulated (follow listservs and check our [website](#) for new CFPs); however, we will accept individual abstracts. Abstracts submitted to the conference individually rather than in response to specific CFPs will be sorted thematically, and **cannot be guaranteed placement** in the conference schedule.

Abstracts or proposals should be no more than 300 words in length and include titles and three to five keywords. Please submit only one abstract to ukpewg@gmail.com. The deadline for abstract submissions is the conference registration deadline (**December 1, 2016**).

Registration

Registration will be linked from our [website](#) **starting in October 2016, and ending December 1, 2016, with no extensions**. The conference registration fee is \$45 for graduate students, and \$90 for faculty and non-academics. There is no fee for undergraduate participants. All University of Kentucky students register for free.

Follow us on Twitter at @ukpewg or on Facebook as the University of Kentucky Political Ecology Working Group. Visit our website www.politicalecology.org.

Please send any questions to the DOPE Organizers at ukpewg@gmail.com.

Submit project proposals and/or questions on proposal processes to 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 on the following page.

Fall 2016 Meeting Schedule

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
November 2, 2016	October 26, 2016
November 16, 2016	November 9, 2016
December 7, 2016	November 30, 2016

Submit project proposals and/or questions on proposal processes to 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.**

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University of Kentucky Student Sustainability Council 2016-2017 Grant Application

45. Name: Jesse Peltan
46. Email: jesse.peltan@uky.edu
47. UK Affiliation: Undergraduate Student
48. Proposed Project Title: 1,000 Bulbs – One Big Change
49. 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
50. Total Amount Requested from the Council: \$2,004.50
51. Would you like to make a presentation to the Council before your proposal is reviewed?
Yes
52. 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
 - Local Environment:
 - Behavioral Change:
 - Species Diversity/Conservation:
 - Other (Please Describe):
 - Education and Social change 1
- Climate Change:
53. Please name any other project leaders:

Name: Jesse Peltan

Title & Department

Undergraduate Student: Mathematical Economics, Philosophy, Environmental Sustainability Studies

Project Role: Head Project Manager

Email: 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

Name: Bob Sandmeyer PhD.

Title & Department

Professor: Philosophy

Faculty: Department of Environmental Sustainability Studies

Project Role: Faculty Advisor

Email bob.sandmeyer@uky.edu

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

54. 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 \$90,600 in energy costs and professors \$32,500 in avoided bulb replacements(see supporting documentation 3- Calculations). The lifetime energy savings of 1,510,000kWh will save 3,261,600 lbs of CO₂ emissions.

We understand the importance of economic viability when it comes to long term sustainability. The 1,000 bulbs project redefines economic viability. At a cost of \$4,009 the project will have a direct lifetime economic benefit of \$123,100. Estimating yearly savings is difficult because usage varies so widely, so I have attached a calculator that allows you to plug in different values for usage, bulb number, electrical rate, etc so that estimates can be made based on whatever parameters the council finds reasonable. In this document is a summary of the table.(see 7- table)

The environmental impact of this project is significant. In addition to saving over 3 million pounds of CO₂, 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. 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 direct environmental impact of this project is notable, but the larger impact comes from the social change it makes possible.

The "One Big Change" we want to make is social. Faculty and staff at UK are in very influential positions. Providing faculty and staff with personal experience with LED lighting will help them make informed decisions on campus and in their own homes. Every single professor that I have talked to about the project saw the benefit from this project and immediately thought about all the other bulbs that UK has, like the bulbs in their offices and classrooms. They all correctly reasoned that those bulbs could save far more money and have an even larger impact. By influencing faculty and staff, we can help to influence policy changes at UK by showing our administration that we think LEDs are an important change.

Many of our 2,000 faculty and 12,000 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 \$3.25(see 4 – quote from Feit Electric).

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 1,300 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(see – 5 Price list/bulb information). 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.

Faculty and staff are some of the most influential people on campus. If we can provide them with a positive experience with LED lighting coming from students that are excited to help their school, LEDs will have a positive place in the consciousness of our faculty and staff. With positive first hand experience with LED lighting, professors will be more likely to rate issues related to LED lighting as important. Every professor that I have spoken to asked about changing other lighting on campus. A large inquiry into our lighting systems from faculty and staff may help give administration the justification they need to devote resources to investigating and installing LED lighting.

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.

55. 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.

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

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

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

57. 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. Professors that have positive experiences with students and LED lighting are more likely to promote LED lighting in the future. Ultimately the goal of this project is bigger than just 1,300 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 1,300 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.

A diverse array of undergraduate students will be involved in the implementation process. Students from a variety of academic and socioeconomic backgrounds will gain experience from communicating with faculty and staff and working with disciplines all over campus. Student/professor and student/staff interaction will help strengthen relationships between students and faculty on campus in the context of sustainability and energy efficiency. Direct interaction with professors will help raise awareness among faculty and staff about the Student Sustainability Council and its projects on campus.

58. 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 diverse group of students from a range of academic and socioeconomic backgrounds will be involved with the implementation of the project. Both project leaders and student ambassadors will speak with a wide range of professors and staff members from all over campus about the project and will install bulbs and record the installations. 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.

Below is a list of volunteers to be student ambassadors. Additional volunteers will be accepted during implementation according to need.

Drake Boling, Philosophy dpbo224@g.uky.edu
 Rose Cobo, Chemical Engineering rcco227@uky.edu
 Francesca Iturri, Materials Science Engineering Fir222@g.uky.edu
 Peyton Moore, Electrical Engineering psmo224@g.uky.edu
 Jack Riordan, Mechanical Engineering jmri243@g.uky.edu

59. 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.

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

Date	
October 5, 2016	Funding Approved by SSC
October 12, 2016	Order and Shipment of Bulbs
October 19-Nov 9, 2016	Installation of Bulbs
April 14, 2017	Survey to participants released (see 6- survey outline)
April 21, 2017	Surveys due, gift card winners selected.
April 24, 2017	Gift Cards Delivered to offices

Once funding is received for the project, project leaders will order ~~20% of the~~ from ~~Felt Electric and Amazon Marketplace~~ ~~Rexel~~ . Giving approximately a week for bulb shipment from the distributor, installation of bulbs will begin once shipments are received. During the shipping period, project leaders will design an informational brochure/flyer for distribution electronically to all project participants. This will include information on LED's, and specifically their use in professional and private environments. ~~A progress report will be filed once the bulbs are installed, at that time the remaining funds will be released and used to purchase bulbs for the second phase.~~

Volunteers will visit faculty and staff offices across university buildings, with the goal of reaching a broad spectrum of departments and offices. Volunteers will visit with participants individually to discuss the project, collect old bulbs for recycling, and to install the new LED bulbs in small lighting fixtures (e.g. lamps) in participating offices. Volunteers will record email addresses of participants for future contact and record keeping.

~~Approximately 6-8 weeks after bulb installation, the SSC will receive the total amount of funds generated from the Kentucky Utilities Co. LED rebate program (reference contact from KU and letter from PPD).~~

In mid-April, using the email directory collected during installation, an electronic survey (designed through a free survey generator) will be distributed to project participants (see 6 – Survey Outline). ~~In order to entice accurate, high response rates, \$10 gift cards to local, sustainable businesses will be awarded through a random drawing (via a random number generator of numbers corresponding to participants' email addresses).~~ Results of the survey will be available to the SSC, included in the SSC post-project outcome report required by the council.

61. 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
62. 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 any media releases. Project leaders and some of the student ambassadors would be available for interviews.
63. 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
1000 60W eq LED bulbs @\$3.25/bulb	\$3,250	\$1,625	FM Utilities and Energy Management
300 40W eq LED bulbs @\$2.53/bulb	\$759	\$379.50	FM Utilities and Energy Management
Total	\$4,009	\$2,004.50	FM Utilities and Energy Management

*See quote from Vicky at Feit Electric for 60W eq
Feit electric does not offer the 40W equivalent bulbs in 90+ CRI for direct sale, the cheapest option for them is amazon.
https://www.amazon.com/Feit-Electric-2700K-Replaces-3-pack/dp/B01D2B5DW8/ref=pd_sim_60_2?ie=UTF8&psc=1&refRID=2AB289ZHYWFHPCKGJMVO
Bulbs will now be purchased through Rexel, one of UK's lighting suppliers.

64. Are you willing to accept a general reduction in your budget?
Yes
65. Are you willing to accept line item changes in your budget?
Yes
66. 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 with 'SSC Proposal' as the subject line.

Supporting Documentation

1. Letter From PPD Regarding Rebate



9/26/2016

Mr. Peltan

I am writing in regards to our discussion about rebate funding in relation to your proposed faculty and staff LED bulb replacement program. I have confirmed with Facilities Financial Management Associate Director Gerald Smyth that we will be able to return any rebates associated with your project to the Student Sustainability Council.

Please contact me at Britney.thompson@uky.edu or 859-257-4171 if you have any questions or need more information.

Thank you,

A handwritten signature in black ink that reads 'Britney Thompson'. The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Britney M. Thompson
Energy Engineer
University of Kentucky
216A Peterson Service Building
Lexington, KY 40506-0005

Hey Jesse-

See attached for a scan of the support letter you requested. I have the original copy in my office if you want it.

Britney Thompson Ragland - PE, CEM
Energy Engineer
University of Kentucky

216A Peterson Service Bldg.
 Lexington, KY 40506
 Phone: [859.257.4171](tel:859.257.4171)
britney.thompson@uky.edu<mailto:britney.thompson@uky.edu>
 Twitter: @EnergyUKY<<https://twitter.com/energyUKY>>
 Connect on LinkedIn<<http://www.linkedin.com/in/britneythompson>>

2. Email and Contact information for Kentucky Utilities

From: Michael Collins <mcollins@franklinenergy.com<mailto:mcollins@franklinenergy.com>>

Date: Mon, Sep 26, 2016 at 8:21 AM

Subject: RE: KU Rebates

To: "Peltan, Jesse" <jesse.peltan@uky.edu<mailto:jesse.peltan@uky.edu>>

Jesse, we have tried to get them to take that off the website but they have not. And most likely they will not remove it until next year now. As the rebate processor we never use the rebate line for LED screw in \$2 they all fall under the LED less than 50 watts for \$5. Please feel free to share my email with them and if they have any questions please reach out to me with any questions.

Thanks,

Michael Collins | Energy Advisor

Franklin Energy Services LLC

LG&E and KU Commercial Rebate Program

1230 South Hurstbourne Pkwy, Ste 111

Louisville, KY 40222

Office: [\(502\) 242-0436 X 2201](tel:50224204362201)<tel:502%29%20242-0436%20X%202201>

Cell: [\(502\) 428-9924](tel:5024289924)<tel:%28502%29%20428-9924>

Fax: [\(855\) 439-3656](tel:8554393656)<tel:%28855%29%20439-3656>

[\[http://www.franklinenergy.com/assets/images/logo.png\]](http://www.franklinenergy.com/assets/images/logo.png)

3. Calculations

Lifetime Electrical Cost Savings

The chosen LED bulbs are rated for 25,000 hours (see 5 - attached price list BPOM60/927/LED)

UK pays UK pays \$0.06/kWh *"Energy Use and the University of Kentucky" UK Facilities Management

1,000 60W equivalent bulbs (use 9.5W each)

$$(60W - 9.5W) * \frac{1kW}{1000W} * \frac{25,000hours}{bulb} * 1000bulbs * \frac{\$0.06}{kWh} = \$75,750$$

300 40W equivalent bulbs (use 7W each)

$$(40W - 7W) * \frac{1kW}{1000W} * \frac{25,000hours}{bulb} * 300bulbs * \frac{\$0.06}{kWh} = \$14,850$$

Lifetime Electrical Cost Savings=\$90,600

Avoided Bulb Replacement

One incandescent bulb lasts for 1,000 hours and costs approximately \$1. Each LED lasts for 25,000 hours

$$\frac{\$1}{1 \text{ incandescent bulb}} * \frac{1 \text{ incandescent bulb}}{1000 \text{ hours}} * \frac{25,000hours}{LED \text{ bulb}} * 1,300 \text{ LED bulbs} = \$32,500$$

Lifetime Direct Economic Benefit: \$123,100

Note: If at some point in the future, bulbs in some lamps are taken home by professors that move their offices, the university will have a reduced electrical savings in proportion to the number of bulbs moved, but the environmental impact will be the same and the professors will save 1.5-2x the money at their electric rate \$0.0943/kWh - (Kentucky average) \$0.12/kWh (national average) vs UK's rate of \$0.06/kWh. The total environmental impact in this case would be the same, and the total economic benefit would be higher, but a lower percentage of it would be saved by the university and a higher percentage would be saved by professors and staff.

Lifetime Energy Savings

1,000 60W equivalent bulbs (use 9.5W each)

$$(60W - 9.5W) * \frac{1kW}{1000W} * \frac{25,000hours}{bulb} * 1000bulbs = 1,262,500kWh$$

300 40W equivalent bulbs (use 7W each)

$$(40W - 7W) * \frac{1kW}{1000W} * \frac{25,000hours}{bulb} * 300bulbs = 247,500kWh$$

Lifetime Energy Savings: 1,510,000kWh

Lifetime Environmental Impact

CO₂ Savings "EIA.gov "How much carbon dioxide is produced per kilowatt hour when generating electricity with fossil fuels?"
<https://www.eia.gov/tools/faqs/faq.cfm?id=74&t=11>

1,000 60W equivalent bulbs (use 9.5W each)

$$(60W - 9.5W) * \frac{1kW}{1000W} * \frac{25,000hours}{bulb} * 1000bulbs * \frac{2.16lbs CO2}{kWh} = 2,727,000lbs CO2$$

300 40W equivalent bulbs (use 7W each)

$$(40W - 7W) * \frac{1kW}{1000W} * \frac{25,000hours}{bulb} * 300bulbs * \frac{2.16lbs CO2}{kWh} = 534,600lbs CO2$$

Lifetime CO₂ Savings: 3,261,600lbs CO₂

Reduced Landfill Waste

All collected bulbs will be recycled.

$$\frac{1 incandescent bulb}{1000 hours} * \frac{25,000hours}{LED bulb} * 1,300 LED bulbs = 32,500 incandescent bulbs$$

avoided environmental cost for producing and disposing of 32,500 incandescent bulbs

4. Feit Electric E-mails with quote to Bluegrass Solar Solutions

On Tuesday, September 13, 2016, Vicky Hibbard <vicky@feit.com> wrote:
 I have these prices for these qty's

BPOM60/927/LED 1000+ \$ 3.25 NOT A LOT OF ROOM ON THIS ONE.

BR3065/927/LED 1000+ \$ 3.65 EA I CAN GET LOWER ON THIS ONE.

From: Jesse Peltan [<mailto:jessepeltan@gmail.com>] **Sent:** Tuesday, September 13, 2016 2:38 PM **To:**
 Vicky Hibbard <vicky@feit.com> **Subject:** Re: Bulk Light bulb pricing

On Wed, Sep 28, 2016 at 10:38 AM, Vicky Hibbard <vicky@feit.com> wrote:
 FREEEEEEE☺

From: Jesse Peltan [<mailto:jessepeltan@gmail.com>] **Sent:** Tuesday, September 27, 2016 5:10 PM

To: Vicky Hibbard <vicky@feit.com>

Subject: Re: Bulk Light bulb pricing

Dear Vicky,

Could you please give me a shipping quote for BPOM60/927/LED 1000+ \$ 3.25 to Lexington Kentucky?

Thank you,
Jesse Peltan

5. Price List with rated life of bulbs (note: price is lower in 1,000+ quantity used in quote)



LED Price List



LED - A19 Dimmable Household / Multi-Use							
Felt Electric Model #	Description	Energy Star Approved	Hours	Lumens	UPC 0-17801	Pack	Cost
BPA19/CL/DM/LED	A19 Dimmable Performance LED, Clear, 40W Equivalent		25,000	500	14113-9	4/12	\$5.50
BPA19/CL/DM/800/LED	A19 Dimmable Performance LED, Clear, 60W Equivalent		25,000	800	14198-6	4/12	\$6.30
A19/DM/GU24/LED	A19 Dimmable Performance LED, GU24 Base, 40W Equivalent		25,000	450	13743-9	4/12	\$6.25
A19/DM/800/GU24/LED	A19 Dimmable Performance LED, GU24 Base, 60W Equivalent		25,000	800	13745-3	4/12	\$7.50
BPOM40/830/LED	A19 LED Dimmable, Omni, 500 Lumen, 3000K	✓	25,000	450	14528-1	4/12	\$3.65
BPOM60/830/LED	A19 LED Dimmable, Omni, 800 Lumen, 3000K	✓	25,000	800	14529-8	4/12	\$3.75
BPOM75/830/LED	A19 LED Dimmable, Omni, 1100 Lumen, 3000K	✓	25,000	1,100	14530-4	4/12	\$7.95
BPOM100/830/LED	A19 LED Dimmable, Omni, 1600 Lumen, 3000K	✓	25,000	1,600	14531-1	4/12	\$8.95
BPOM60/927/LED	A19 LED Dimmable, Omni, 800 Lumens, Enhance, 90 CRI	✓	25,000	800	14186-3	4/12	\$3.85
BPOM40/850/LED	A19 LED Dimmable, Omni, 450 Lumen, 5000K	✓	25,000	450	14547-2	4/12	\$3.65
BPOM60/850/LED	A19 LED Dimmable, Omni, 800 Lumen, 5000K	✓	25,000	800	14548-9	4/12	\$3.75

6. Outline of Survey

Post-Project Survey Outline

This outline reflects the major categories that will comprise the survey distributed to participating members in the project. Included in each section are examples of possible questions. Because we are not sure of the exact demographics of participating members, a final copy of a survey would most likely not reflect the population included in this project (e.g. different departments, buildings, etc.)

Section 1: LED Usage – questions pertaining to the use of installed bulbs.

1. On average how many hours per week do you use the fixture with the LED installed through this project?

2. Do you notice a difference in the quality of lighting from your previous bulb (e.g. incandescent, fluorescent)?

Section 2: Outreach – questions pertaining to increased interest in LED usage

1. Approximately how many students visit your office per week?
2. On average how many students have mentioned a difference in the lighting in your office space?
3. Have you explored refitting your home with LED bulbs?
4. Are you more likely or less likely to use LED bulbs now, than you were previously?

7. Savings Calculator Table

Replacing Incandescent Bulbs											
Average Hours Per Day	Number of 60W eq	Number of 40W eq	Electrical Rate (\$0.06/kWh for UK)	kWh/year savings	\$/year savings	Milligrams of Mercury Saved/year	Pounds of CO2/year Savings	Lifespan of Bulbs (years)	Lifetime Savings (kWh)	Lifetime Electrical cost savings \$	Lifetime Savings CO2
1	1000	300	0.06	22061.1	1323.666	0	47651.976	68.49315068	1511034.247	90662.05479	3263833.973
2	1000	300	0.06	44122.2	2647.332	0	95303.952	34.24657534	1511034.247	90662.05479	3263833.973
3	1000	300	0.06	66183.3	3970.998	0	142955.928	22.83105023	1511034.247	90662.05479	3263833.973
4	1000	300	0.06	88244.4	5294.664	0	190607.904	17.12328767	1511034.247	90662.05479	3263833.973
5	1000	300	0.06	110305.5	6618.33	0	238259.88	13.69863014	1511034.247	90662.05479	3263833.973
6	1000	300	0.06	132366.6	7941.996	0	285911.856	11.41552511	1511034.247	90662.05479	3263833.973

Replacing CFL bulbs											
Average Hours Per Day	Number of 60W eq	Number of 40W eq	Electrical Rate (\$0.06/kWh for UK)	kWh/year savings	\$/year savings	Milligrams of Mercury Saved/year	Pounds of CO2/year Savings	Lifespan of Bulbs (years)	Lifetime Savings (kWh)	Lifetime Electrical cost savings \$	Lifetime Savings CO2
1	1000	300	0.06	6684.075	401.0445	316.3333333	14437.602	68.49315068	457813.3562	27468.80137	988876.8493
2	1000	300	0.06	13368.15	802.089	632.6666667	28875.204	34.24657534	457813.3562	27468.80137	988876.8493
3	1000	300	0.06	20052.225	1203.1335	949	43312.806	22.83105023	457813.3562	27468.80137	988876.8493
4	1000	300	0.06	26736.3	1604.178	1265.333333	57750.408	17.12328767	457813.3562	27468.80137	988876.8493
5	1000	300	0.06	33420.375	2005.2225	1581.666667	72188.01	13.69863014	457813.3562	27468.80137	988876.8493
6	1000	300	0.06	40104.45	2406.267	1898	86625.612	11.41552511	457813.3562	27468.80137	988876.8493

