

Student Sustainability Council

Meeting Minutes

4/4/18

Members Present:

Name	P/A	Name	P/A	Name	P/A
Zoe Gabrielson	P	Julianna Dantzer	E	Megan Van Son	P
Nachie Braga	P	Mitch Mullins	A	Carson Harral	P
Cassie Odom	A	Jared Miniard	P	Cameron Luker	P
Sam Beavin	P	Viktor Halmos	P	Isabel Jenkins	P
Braydi McPherson-Hathaway	P	Ryan Lark	P	Leslie Potts	P
Rachel Kreppert	A	Maya Gershtenson	P		
Gabriel Smith	P	Claire Crosby	P	Shane Tedder	
Lauren Thomas	P	Abby Shelton	A		
Rachel Cook	P	William Varney	A		
Sophie Beavin	E	Maya Collings-Patterson	E		
Amanda Williams	A	Maria Sanchez	E		

1) Beginning of Meeting

- a) 7:30 - Reading of the Preamble and Introductions

2) Proposal Presentations

- a) 7:36 - Proposal #1 Presentation Begins
- b) 7:48 - Proposal #1 Presentation Ends and Q&A Begins
- c) 7:56 - Proposal #1 Q&A Ends

3) Proposal Discussions

- a) 7:56 - Discussion of Proposal #1: Office of Sustainability GA Begins
- i) A lot of money, 13.5% of total budget for the year would be going towards internal development
 - ii) Potential personal bias, many council members are familiar with the applicant
 - iii) No match from any other organization
 - iv) Should we give more support to the office of sustainability, especially in the face of budget cuts
 - v) **AMENDMENT:** Should the proposal be funded, the GA responsibilities as they relate to the SSC will be decided by a meeting of the current (17/18) Directors.
 - vi) Three motions to extend
- b) 8:25 - Discussion of Proposal #1 Ends
- c) 8:26 - Motion to vote on Proposal #1 (Motion by Lauren Thomas, 2nd Sam Beavin)
- VOTE RESULTS - PASSED -** Yes 9 No 8
- d) 8:27- Discussion of Proposal #2: Solar Tables Begins
- i) Site is too far from academic core
 - ii) Potentially temporary as the hospital expands
 - iii) Solar panels would be vulnerable to destruction
 - iv) Could be used more by the general population rather than the student body
- e) 8:37 - Discussion of Proposal #2 Ends

f) 8:37 - Motion to vote on Proposal #2 (Motion by Rachel, 2nd Zoe)

VOTE RESULTS - PASSED - Yes 0 No 17

g) 8:39 - Discussion of Proposal #3: Undergraduate Researcher Begins

- i) Our role relative to state funding cuts
- ii) We have a funding relationship with them from the past
- iii) Potential close SSC follow up, due to steward of funds

h) 8:52 - Discussion of Proposal #3 Ends

i) 8:52 - Motion to vote on Proposal #3 (Motion by Gabriel Smith 2nd Ryan Lark)

VOTE RESULTS - PASSED - Yes: 15 No 2

j) Scope Change 1: Outreach Intern->GA

i) **VOTE RESULTS - PASSED -** Yes 14 No [2]

k) Scope Change 2: Plenary Last meeting

i) **VOTE RESULTS - PASSED -** Yes 16 No [0]

4) End of Meeting

- a) [TIME] - Outreach Committee Announcements
- b) [TIME] - Development Committee Announcements
- c) [TIME] - MEETING ADJOURNED

5) Voting Report & Proposals from Meeting

University of Kentucky Student Sustainability Council 2017-2018 Grant Application

1. Name: **Jennifer Taylor**
2. Email: **jenniferdai14@gmail.com**
3. UK Affiliation: **Research Analyst/Future Graduate Student**
4. Proposed Project Title: **SSC/Office of Sustainability Graduate Assistantship**
5. If applicable, please provide the sponsoring or overseeing/ organization. (e.g. the Office of Sustainability, Wildcat Wheels, the Dept. of Ag. Economics, etc.): **Office of Sustainability**
6. Total Amount Requested from the Council: **\$27,978.68**
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:
 - Climate Change:
 - Local Environment:
 - Behavioral Change:
 - Species Diversity/Conservation:
 - Other (Please Describe): **SSC/Internal**
9. Please name any other project leaders:

Name	Shane Tedder
Title & Department	Office of Sustainability
Project Role	Advisor
Email	shane.tedder@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.

The SSC's main directive is to cultivate and promote a culture of sustainability here at UK. Thus, the purpose of a graduate assistantship is to increase the overall efficacy and capacity of the SSC and Office of Sustainability in order to better cultivate the culture of sustainability. Additionally, as the SSC has grown in members and in funding capacity, there is a renewed need for a focused professional that is dedicated to supporting SSC operations. The graduate assistantship will be a ten month appointment, wherein 50% of the time will be dedicated to the SSC and 50% of the time will be dedicated to the Office of Sustainability.

Responsibilities pertaining to the SSC:

- Assist SSC staff advisor with all administrative aspects of council operations, including financial management, administrative paperwork, meeting facilitation, project/post-award follow-up and evaluation.*
- Attend director meetings, general SSC meetings, and committee meetings as needed.*
- Research different student fee distribution models as well as student sustainability structures. As the SSC increases its funding capacity, it is useful to explore all options to maximize council efficiency and distributing capabilities.
- Manage the website. This will include receiving regular website updates from the Director of Outreach, making subsequent edits and revisions. The graduate assistant will also research and highlight previous projects that have been funded and meetings that have taken place in the past 3 or 4 years.
- Create and execute a promotions and outreach strategic plan in conjunction with the Director of Outreach. This is to ensure year-to-year continuity and to increase the number of proposals received and increase the dollar amount requested.

*Some of these responsibilities will be in place of the SSC staff advisor.

Responsibilities pertaining to the Office of Sustainability:

- General support to the Office of Sustainability as well as assisting with the administrative functions of the office.
- Oversee the Student Sustainability Internship Program with the goal to make the experience more meaningful for the interns. This would include designing and implementing monthly cohort meetings while serving as a dedicated point-of-contact for contact for both the interns and mentors. It would also include creating an evaluation tool for the program and reporting/promoting the individual projects.
- Manage campus and community-wide promotions and outreach. This includes developing the website, promoting projects, managing listservs, etc.
- Assist with the STARS certification and the campus sustainability strategic plan.

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.

N/A

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

- | | |
|-------------------|--|
| · UK (general): | · Community: |
| · Undergraduates: | · Faculty: |
| · Graduates: | · Other (Please Describe): SSC/Internal |

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).

The SSC, present and future, benefits by having a professional dedicated to researching programmatic change while also providing an increased level of support. It will also benefit from

strategic and targeted outreach as many students involved tend to struggle with being available to attend outreach events. This will also benefit the SSC in the future as it will be a concrete plans to be used by future outreach directors. Additionally, the students participating in the Student Sustainability Internship Program will greatly benefit by having the program become more meaningful and useful for them.

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?

As a graduate student, Jennifer Taylor will directly benefit from the proposed project. She will be in the Martin School working on Master of Public Administration, thus the administrative, management, and assessment skills gained through this assistantship will be greatly beneficial. Other skills include budget and project management, as well as strategic planning. Outputs from the assistantship will include the STARS report, the strategic plans, the internship report and the welcome report for Fall 2019.

Other students directly involved would be the SSC Directors as well as general Council Members. They would receive direct professional mentoring because of the increased attention and support. The interns participating in the Student Sustainability Internship Program would also gain further professional mentoring, have the opportunity to influence the development of the program, and increase cohort building as a result of the graduate assistantship position.

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.

Jennifer Taylor served on the Council from January 2016 to May 2017 as the Political Ecology Working Group's representative. She was also funded by the SSC to attend AASHE in Fall of 2016 and to present at AASHE Fall 2017.

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

The tuition and fees would be disbursed at the beginning of each semester. The stipend would be distributed on a biweekly basis after submitting a timesheet. The graduate assistant will submit reports at the end of each semester to the SSC. The Graduate Assistantship program should be evaluated at the end of the Spring 2019 to ensure its continued efficacy and to determine if the program remains useful or if it should continue. This position, if funded, will provide the same deliverables as the summer internship, thus requiring the completion of the welcome report and would be completed in May 2019. An additional metric of performance is if the dollar amount requested has increased throughout the year.

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.

Required admission to UK Martin School.

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?

N/A

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.

Budget Plan A

Description	\$ Total Cost	\$ Request from SSC	Source of remaining funds
Tuition for 2018-2019 Academic Year	\$13,225.68	\$13,225.68	
Full Student Health Plan for 2018-2019 Academic Year	\$2,253	\$2,253	
Stipend	\$12,500 (\$15.60 p/hr, 20 hr p/wk, 40 wks)	\$12,500	
Total	\$ 27,978.68	\$27,978.68	

Budget Plan B

Description	\$ Total Cost	\$ Request from SSC	Source of remaining funds
Tuition for 2018-2019 Academic Year	\$13,225.68	\$13,225.68	
Full Student Health Plan for 2018-2019 Academic Year	\$2,253	\$2,253	
Stipend	\$12,500 (\$15.60 p/hr, 20 hr p/wk, 40 wks)	\$9,500	\$3,000 from Office of Sustainability*
Total	\$ 27,978.68	\$24,978.68	\$3,000

*contingent on scope change approval of Outreach & Promotions Internship

Budget consideration: This position, if funded, would provide the same deliverables as the summer internship and has the potential to provide some cost avoidance for Summer 2019.

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.

Supplemental attachments include proof of admittance to Martin School.

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 2017-2018 meeting schedule is on our website.

**University of Kentucky Student Sustainability Council
2017-2018 Grant Application**

1. Name: Rebekah Radtke
2. Email: rebekah.radtke@uky.edu
3. UK Affiliation: College of Design
4. Proposed Project Title: Pocket Park: Connecting Downtown to Campus
5. If applicable, please provide the sponsoring or overseeing organization. (e.g. the Office of Sustainability, Wildcat Wheels, the Dept. of Ag. Economics, etc.):
6. Total Amount Requested from the Council: \$31,367.20
7. Would you like to make a presentation to the Council before your proposal is reviewed? Not necessary, but happy to if the council needs more project information.

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

9. Please name any other project leaders:

Name	Teonna Radevski, Nestor Hernandez-Murillo, Jr, Irvin Shaifa, Savannah Page, Cameron Ginter, Leah Umburg
Title & Department	College of Design
Project Role	Designers, Students in Community Workshop Course
Email	
Name	Melody Flowers
Title & Department	Executive Vice President for Finance and Administration, Executive Director for Strategic Analysis and Policy
Project Role	key stakeholder in securing property, project implementation, and project development
Email	Melody.flowers@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.

Project Description

In our community workshop course, design students from architecture and interior design have been tasked to use community engagement methods to address a campus need in a sustainable way. We have focused our efforts on a vacant lot located at the corner of Maxwell and Limestone which is a key location that highly underutilized. As the gateway to our campus and the nexus of the intersection between campus and downtown, it has unlimited potential to serve the University of Kentucky students and faculty, Good Samaritan Hospital, and the downtown population. Utilizing diverse research methods and collaborative design processes, students have identified how

design can positively impact our community using campus as a living laboratory to explore new ideas. This project has the capability to turn what is currently an eyesore into a prime opportunity to create a sense of community at the gateway to north campus.

It is not new or innovative to want to create a park that encourages public life to connect two diverse populations in your community. However, what is innovative about our project is that it is rare to have a vacant, university owned property in a prime location that is available to transform directly adjacent to downtown. Because of this location, we must have a multitude of stakeholders to ensure the implementation of our idea. Our approach is innovative because through a community design class we have been able to engage many various stakeholders throughout the design development and gained their trust, input, and expertise to inform and create the final design. Stakeholders have provided invaluable feedback to contribute to an integrated design practice that values collaborative human centered design methodologies. The continued analysis and synthesis of the research and feedback informed all aspects of the final design solution, a key element of this design is a solar charging station with seating.

Project Goals

This pocket park can promote inclusivity, connecting downtown to campus, bridging the healthcare community through art and design in sustainable and creative ways. By making an atmosphere that connects students to beautiful outdoor spaces, this small open lot can inspire creativity and provide students the opportunity to create a space of their own.

The redesign of this vacant lot can provide faculty, students, and community members the opportunity to appreciate beauty and loveliness every day in their commute, at their bus stop or on their way home after class.

Seating, shade, lighting and flora will improve the quality of life and inspire appreciation for the beautiful campus and downtown. The park design will provide places on the perimeter of campus to read, study, and enjoy the outdoors that attract others to campus.

This will be accomplished through the addition of solar table charging stations that would be the feature design element of the park. This grant requests for the funding of the ConneCTable Solar Charging Tables to be implemented as a key part of the park design.

Long Term Impacts

If you were to ask someone who works downtown to come to campus, they would say it is too far away. If you were to ask a student to go downtown they would say it is too far from campus. The campus of the University of Kentucky meets downtown at this project location and are located next to each other. This project could transform the perception that the two communities are distinct entities into one shared community. This project seeks to break the notion of separation and barriers through this shared spot and remove the perception of distance and disconnect.

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.

The following affiliates are contributing to the overall implementation of the park:

Executive Vice President for Finance and Administration, Executive Director for Strategic Analysis and Policy, Melody Flowers- key stakeholder in securing property, project implementation, and project development and \$2,500 to implement project

Design Students, Teonna Radevski, Nestor Hernandez-Murillo, Jr, Irvin Shaifa, Savannah Page, Cameron Ginter, Leah Umburg- developed research, community engaged process, and final park design

University of Kentucky Transportation Services, Lance Broeking- providing in kind donation of bike racks and \$5,000 in financial support for further pedestrian and bicycle infrastructure

Bluegrass Community Foundation, Lisa Adkins- \$2,500 to support the development and implementation of the park, stakeholder

Downtown Lexington Leadership, Ethan Howard- \$2,500 to support the development and implementation of the park, served as project reviewer and stakeholder, advise for creative place making

Lexington Fayette County Urban Government Parks and Recreation, Michelle (Olup) Kosieniak- \$2,500 to support the development and implementation of the park, served as project reviewer and stakeholder

Donovan Trust- pending funding of \$15,000 to support the implementation of the park

University of Kentucky Police Department, Officer Nathan Brown- insure safety and security of the park, committing to new surveillance and 24 hour video monitoring of the site, proposed new safety tower near park, participant at workshop

University of Kentucky Facilities Management- advise for the maintenance and support the long term sustainability of the project

Mayor's Office, Scott Shapiro, Chief Innovation Officer- served as project reviewer and stakeholder

University of Kentucky Risk Management, Todd Adkins- served as project reviewer and stakeholder, will advise project to ensure safety

Facilities Services Director, Tim Clark- served as project reviewer and stakeholder, pending joint grant to receive crumb rubber as an experimental path material on site

University of Kentucky Sustainability Coordinator, Shane Tedder- working with alternative transit to ensure mobility to site, served as project reviewer and stakeholder

University of Kentucky Facilities Planner, Judy Needham- served as project reviewer and stakeholder

University of Kentucky Campus Architect, Warren Denny- will coordinate to ensure meets university standards and approval, stakeholder in workshop

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

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

Located in a central corridor where campus and downtown connect, along a bike path, bus route directly adjacent to retail, dining, and bars highly visible and would have immediate impact on a large population of downtown residents, hospital staff, and university community. It is open to everyone and would have the potential to impact hundreds of people daily.

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?

Over the course of the semester, students have researched best practices, conducted research and observations on how the space is currently being used and hosted workshops that engage the various stakeholders. This information fueled six different design proposals which were shared with the community at large. One student design proposal was selected, presented to stakeholders, and further refined based on their feedback. This ultimately led to the decision to utilize solar charging stations.

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.

I have been previously funded with other courses focusing on Design Week.

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

Students have finalized the design in March and will begin installation of the project in April. It will continue to be implemented over the summer and into the fall. The design will continue to evolve over the next year. We would order the stations as soon as we received funding to install on site this summer.

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.

The project has engaged various stakeholders throughout the process and team will present the final plan to facilities on April 2 for final approval.

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?

When the park opens, the SSC will be recognized as a funding entity for the project in all media outlets. The project leader would be available for an interview along with the students would have designed the space.

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
(2)-ConnecTable Hub (install and custom bench)	\$31,367.20	\$31,367.20	0

20. Are you willing to accept a general reduction in your budget?

Yes, but it would limit our ability to purchase two solar charging stations which would enhance the site. I have spoken to solar energy experts at UK and they believe this to be a very reasonable price for this type of product.

21. Are you willing to accept line item changes in your budget?

Yes. I have attached an estimate for one and two hubs for your reference.

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

See attached documents for specifications and estimates.

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 2017-2018 meeting schedule is on our website.

University of Kentucky Student Sustainability Council 2017-2018 Grant Application

1. Name: Michael Hayes Wilson
2. Email: Michael.Wilson@uky.edu
3. UK Affiliation: Senior Research Engineer, Center for Applied Energy Research
4. Proposed Project Title:
Catalyzing Undergraduate Research: Improving the efficiency of algae-based carbon dioxide utilization
5. If applicable, please provide the sponsoring or overseeing organization. (e.g. the Office of Sustainability, Wildcat Wheels, the Dept. of Ag. Economics, etc.): UK Center for Applied Energy Research (CAER)
6. Total Amount Requested from the Council: \$6,835.50
7. Would you like to make a presentation to the Council before your proposal is reviewed?
I will leave that up to the discretion of the Council, but I am happy to do so and answer any questions the Council may have.

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

9. Please name any other project leaders:

NA

Name
Title & Department
Project Role
Email
Name
Title & Department
Project Role
Email

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.

During the summer of 2017, Madan Archaya, a Nepalese immigrant and student from Kentucky State University, was sponsored through an exchange program between UK CAER and Kentucky State to provide research opportunities for undergraduate students of diverse backgrounds. During this time, he showed an incredible aptitude for research and development, despite his relative inexperience. Madan is involved in a 3-2 program between KYSU-UK and will be transferring to UK during the 2018-19 academic year.

The purpose of this project is to continue working on and developing a low cost control system for an algae photobioreactor, invented and operated at the UK CAER, as well as support Madan's academic research and transition to the UK family. One major aim of the control system improvements is to use system inputs more

efficiently, thereby improving the environmental impact of algae cultivation for the production of bioproducts from carbon dioxide waste streams.

This project will contribute to UK student knowledge through the enhancement of Madan's experience at UK, in addition to the dissemination of the lessons learned during this research program to the broader UK community. Attitudes and cultures of other students at the UK CAER, supported by different projects, will be impacted by working with and getting to know someone with Madan's background.

Regarding the 3 pillars of sustainability, the economics and efficiency of the algae growth system will be improved, which would in turn improve the environmental impact of the system. As stated above, the social aspect will be impacted through a cultural exchange associated with people of different backgrounds working together.

Potential long term effects include the development of intellectual property that could supply UK with a licensing revenue stream. Additionally, a prototype control system developed over the course of the program will provide a customized tool that will be used to improve the day to day execution of applied algae research.

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.

This project will be housed within the UK CAER Biofuels and Environmental Catalysis group. If approved, 2 Research Engineers, with a combined 13 years of experience in this field, will be supported by the UK CAER to provide cost share (~\$7,584) in the form of 2 weeks' effort, each, to work on the project and provide mentorship. Additionally, a supplies budget (\$1,000) will be made available to fund material needs of the project.

The purpose of this application is to obtain the funds necessary to support a promising undergraduate researcher, while enhancing the diversity of the project team.

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

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

The biggest impact will be on Madan, with the requested funding being used to support the research experience of a Nepalese student. Additionally, other students (supported by different projects) at UK CAER will be impacted by the opportunity to work with someone from a different background. The full time research staff, within the UK CAER biofuels and environmental catalysis research group (6), will also be impacted by the opportunity this grant would afford.

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? Yes. Madan Archaya will be supported by this project. He is an electrical engineering student from Nepal who is transferring from Kentucky State University. As part of his training, he will be exposed to state of the art research, across a variety of fields, while being immersed in a progressive workplace safety culture. He will learn and improve upon a variety of technical skills, and the output from his work will be used in the day to day

execution of algae CO₂ utilization research. His work will inform and develop a student poster/presentation to be used at various poster competitions, in addition to sharing his work at the 2018 UK Sustainability Forum.

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.

NA

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

The project will run from May 7 through August 17, and the funding will be used to support an undergraduate research assistant at UK CAER for 15 weeks.

Milestones:

May 25th – Initial assessment of potential improvements and scope of work finalized

June 29th – Updated control system prototype completed

July 31st – Operational testing and stability of system concluded

August 17th - Project reporting and poster finalized

The main deliverable of the project will be the production of a prototype control system for the UK CAER algae photobioreactor. In addition to the hardware (electrical circuits, micro controller, valves, relays, sensors), software will be developed to facilitate user interaction with the control system, as well as provide autonomous operation of the algae growth system. The secondary deliverables will be a final report summarizing the project, as well as a poster to be used in presentations/competitions, including the 2018 Sustainability Forum

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. If funding is made available, this promising student will be housed and managed by the UK CAER Biofuels and Environmental Catalysis Group.

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 included as a sponsoring organization and collaborator in all future presentations, reports, and publications regarding UK's algae-based carbon dioxide utilization research. Specifically, an article will be written about the project, highlighting Madan's story and the SSC's critical role in this work, to be released via the UK CAER website and UK NOW. Members of the project team will be available for a radio interview and will participate in the annual Sustainability Forum.

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
Salary for undergraduate research	\$6,835.50	\$6,835.50	NA
Supplies for project (cost share)	\$1,000	\$0	UK CAER
Senior Research Engineer (cost share)	\$4,362.50	\$0	UK CAER
Assistant Research Engineer (cost share)	\$3,221.50	\$0	UK CAER

NOTE: I used the standard CAER undergrad rate of \$10.50 /hr (+9% to account for health care costs), a 40 hr work week, and a 15 week period informed by the academic calendar. The proposed budget cuts have us tightening our belts, which has me looking for alternative ways to keep students involved in our research.

20. Are you willing to accept a general reduction in your budget? Potentially. This budget was developed to support Madan Archaya for 15 weeks and provide a paid summer research experience. Any reduction to the budget will result in a reduced scope, limiting the efficacy of the program.
21. Are you willing to accept line item changes in your budget? No, see answer to number 20.

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** 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 2017-2018 meeting schedule is on our website.

3/28/2018

Conditional Scope Change Request to the Student Internship Proposal

This is a conditional scope change request. If the proposal to create a graduate assistantship (GA) to support the work of the SSC and the Office of Sustainability is approved, then I request that the \$3000 earmarked for the Promotions and Outreach intern in the previously-approved Student Internship Proposal be reallocated to support the graduate assistantship expenses. The rationale for this change is two-fold. First, if the GA position is approved, I believe the hours dedicated to support the Office of Sustainability will be sufficient to cover the tasks that would have been covered by the promotions and outreach intern. Relatedly, the scope change would reduce the level of direct SSC support to student staffing of the Office of Sustainability. If the GA proposal is not approved, this scope change request is void. If the GA Proposal is significantly amended, this scope change request may be subject to change.