

Student Sustainability Council
Meeting Minutes
11/5/19

Taken by: Claire Hilbrecht

1. Beginning of Meeting

- a. 7:01 - Reading of the Preamble and Introductions

2. Proposal Presentations

- a. 7:03 - Solar Car Presentation Begins
- b. 7:13 - Solar Car Presentation Ends and Q&A Begins
 - a. What are the sustainability benefits of updating the solar array?
 - i. Greater efficiency- up to 10% increase
 - ii. We don't want to take the current solar panels off of the car because they tend to be good showcases for sustainability, so building new ones is important
 - b. Will the solar panels on the trailer be able to harness enough energy?
 - i. Yes
 - c. What is the total ballpark budget for a solar car project?
 - i. About \$70,000
 - d. It says that your project completion date isn't until January 2021...will you be requesting more funds next year to complete this project?
 - i. The majority of the projects in this proposal will be completed this year, besides Gato VII
 - e. Does the solar array include all of the other necessary components besides the panels?

i. Yes

c. 7:17 - Solar Car Q&A Ends

3. Proposal Discussions

a. 7:18 - Discussion of Solar Car begins

- i. A generator emits a small carbon footprint, so it wouldn't be super practical for that amount of money...Seems like it could just be a proof of concept
- ii. It seems like a lot of what a solar car stands for is a proof of concept anyway
- iii. This is a lot of money that could be used elsewhere
- iv. The solar car is a huge deal for the College of Engineering, so it is a good investment for those students
- v. Outreach for high schools and middle schools is a priority
- vi. They came to the Sustainability Fair, so they are out in the community advocating for sustainability
- vii. Their little upgrades each year cost us a lot of money
- viii. Is this amount of money supposed to carry them through to 2021, or will they need more
 1. It seems like the majority of those funds will be used within the year
- ix. They have come back every year since 2015
- x. They meet our constitution funding guidelines
 1. It is up to this council if we want to send a message regarding coming back for funding

- xi. Do they need solar panels from that specific company or are there cheaper options
 - 1. Those panels are sustainable, so isn't necessarily something we would want to compromise
 - 2. They could recycle the panels from the old cars to be used on the trailer, since they aren't being recycled in a showcase
 - a. That is not really within our scope
- xii. Motion to extend- Isabel, 2nd- Cameron
- xiii. You want to think about the opportunity cost here...Since the Council has been funding this project for a long time, we are sending a message of continuity within our Council. We would be losing that if we didn't fund them
 - 1. It would be a shame to lose this strong partner
 - 2. This is as real project, so it is good for us to fund and have our name on
- xiv. Asking for more funding in the future, even for the same project, would count as a new project under the constitution

b. 7:31- Discussion of Solar Car ends

c. 7:31 - Motion to vote on Solar Car (Motion by Isabel, 2nd Josh)

7:36- Motion to vote on paper and nullify votes on computer (Motion by Sophie, 2nd Isabel) - passed with simple hand raise

VOTE RESULTS - PASSED Yes [20] No [0] Abstain [0]

PROPOSAL #1 VOTING RECORD

Name	Y/N/A	Name	Y/N/A	Name	Y/N/A
Josh Ehl	Y	Cameron Luker	Y	Isabel Jenkins	Y
Sophie Beavin	Y	Kristen Gould	Y	Hattie Nunley	
Beth Evers		Joel Huether		Megan Reinhart	
Maria Sanchez		Sam Leuthold		Camille Harn	
Bethany Schagane	Y	Alyssa Archer	Y	Edward Lo	Y
Jake Simanek	Y	Brittany Lefebvre	Y	Olivia Tussey	Y
Bri Stanley	Y	Madi Syndor	Y		
Darren Tosh	Y	Jack Swab			
Claire Hilbrecht	Y	Sydney King	Y		
Kelly Walker	Y	Ashlee Edmonson	Y		
Skyler Hornback	Y	Danielle Doering	Y		

Amount requested: \$13,000

Amount approved: \$13,000

ATTENDANCE

Name	P/A	Name	P/A	Name	P/A
Josh Ehl	P	Cameron Luker	P	Isabel Jenkins	P
Sophie Beavin	P	Kristen Gould	P	Hattie Nunley	A
Beth Evers	A	Joel Huether	A	Megan Reinhart	A
Maria Sanchez	A	Sam Leuthold	A	Camille Harn	A
Bethany Schagane	P	Alyssa Archer	P	Edward Lo	P
Jake Simanek	P	Brittany Lefebvre	P	Olivia Tussey	P
Bri Stanley	P	Madi Syndor	P		
Darren Tosh	P	Jack Swab	A		
Claire Hilbrecht	P	Sydney King	P		

Kelly Walker	P	Ashlee Edmonson	P		
Skyler Hornback	P	Danielle Doering	P		



Funding Application

Before beginning the application process, please verify that you understand the terms and conditions for receiving funding from the SSC:

- The SSC cannot apply retroactive funding, all budget items must occur after the meeting date where the proposal is reviewed.
- Proposals are accepted on a rolling basis and the due date for consideration at each meeting is one week prior to that meeting.
- If approved, the project leader has twelve months to spend the funds. If the project requires an extension beyond this timeline, the project leader will need to submit an extension request.
- The money disbursed from this fund comes from student fees, so sustainability-related student impact is a necessary component for any proposal.
- Presenting the project to the Council is mandatory.
- In order to preserve the Council's ability to effectively review and consider proposals we are limited in the amount of proposals we may review per meeting. In the case that more proposals are received than can be reviewed for a given meeting, Council directors will decide which proposals are heard based on project timeline and order of submission.

By checking the box below, I verify that I understand and accept these terms and conditions.

: Yes

Project title: University of Kentucky Solar Car

Project leader name: Thomas Barber

Project leader email: solarcar@engr.uky.edu

**Project leader additional contact information:****Contact type****Contact info**

Phone (502) 819-2087

Phone Christopher Wheatley (270) 766-7014

Total amount requested from the Council (round up to the nearest whole number): 13,000**UK affiliation:** Student

Please fill out the following information about yourself and any other students involved on the project. Previous involvement with the SSC may include membership, funding requests, or involvement with an organization affiliated with the SSC. Answer to the best of your knowledge.:



Name	Major(s)/department	Academic year based on projected graduation date	Previous involvement with the SSC
Christopher Wheatley	Materials Engineer	Junior	"Green Talks" Interviewee, UK Solar Car Project in previous years
Thomas Barber	Computer Science	Senior	UK Solar Car Project in previous years
Rayna Weibrech	Materials Engineer	Senior	"Greek Talks" Interviewee, UK Solar Car Project in previous years
Chris Heintz	Mechanical Engineer	Graduate Student	UK Solar Car Project in previous years
Craig Lindsey	Mechanical Engineer	Senior	UK Solar Car Project in previous years
Cole Ivey	Electrical Engineer	Junior	UK Solar Car Project in previous years
Donovin Lewis	Electrical Engineer	Junior	UK Solar Car Project in previous years
Connor Varney	Materials Engineer	Graduate Student	UK Solar Car Project in previous years
Shelley	Mechanical Engineer	Sophomore	UK Solar Car Project



Williams			in previous years
Dylan Poe	Mechanical	Senior	UK Solar Car Project in previous years
Luke Wormald	Electrical Engineer	Senior	UK Solar Car Project in previous years
Brennen Green	Mechanical Engineer	Freshman	No previous SSC experience
Daniel Kennedy	Mechanical Engineer	Freshman	UK Solar Car Project in previous years
Sheldon Salins	Mechanical Engineer	Junior	UK Solar Car Project in previous years
Winston Smith	Electrical Engineer	Senior	UK Solar Car Project in previous years
Benson Pauley	Biology	Senior	UK Solar Car Project in previous years
Songcheng Lin	Mechanical Engineer	Senior	UK Solar Car Project in previous years
David Sanabria	Electrical Engineer	Freshman	No previous SSC experience
Evan Wells	Computer Science	Freshman	No previous SSC experience
Spencer Gillaspie	Computer Science	Freshman	No previous SSC experience



Michael Hentz	Computer Science	Freshman	No previous SSC experience
Evan Yang	Computer Science	Senior	UK Solar Car Project in previous years

Jobs funded by the Council should be priced at a livable wage. As one of the three pillars of sustainability, economic sustainability is an important component of any project. The Council aims to fund all jobs at a livable wage. If you are requesting funds for an internship/stipend/etc, please explain how that budget was determined in the framework of economic sustainability.: These funds would not go to an internship/stipend/etc.

Understanding the supply chain for any material purchased is an important component of sustainability. If your project requires materials, please include an explanation of their sourcing.: For our project as a solar car team, solar panels and solar cell electronics are the primary resource. We purchase our solar cells from SunPower, a residential and commercial solar cell manufacturing company. SunPower is the first solar company to achieve Cradle to Cradle Certified Silver designation, certified for sustainably “sourcing materials safe for humans and the environment, and ensuring that these materials are recycled at the end of the products’ life. Also emphasized is the importance of honoring the natural environment and the people who create the product, as well as the use of renewable energy and preservation of water.”

How did you hear about the SSC?: We have been a strong partner with SSC for several years now, and as a green energy group at UK it has been a pleasure working with the “Green Talks” radio show and collaborating for sustainability on campus.



Describe how your project relates to the three pillars of sustainability (environmental stewardship, economic equity, and social inclusion):

As a solar car racing team, environmental stewardship is the primary focus of our team. Solar Car racing from the beginning has been a look about the future of transportation, and to glimpse what is possible with the current technology of green energy. Our equity in economics comes strongest from the variety of students we have had work with us in the past. While a dominant group in the college of engineering, we have had business, arts and sciences, communications, and visual arts students work with us. We believe that everyone can play a role with UK Solar Car, and giving more people that ability to participate in green energy is very important to us. Social Inclusion is a basis of solar car operations when not racing. We present the car to various elementary, middle, and high schools around Lexington, showing young students a car unlike anything they have ever seen before, built entirely by students like them. We also participate in environmental vehicle shows, green energy organizations, and events with UK Sustainability.

Please provide an in depth description of your project. You will likely want to copy and paste your response into the text box:

Our project goal is to expand our solar-reliant technology in three parts. First, we will build a new solar panel array for our next car, Gato del Sol VII. Gato del Sol VII is to be our most efficient solar vehicle to date. Our second project is to build a solar array on top of our trailer, allowing us to race and operate much more environmentally friendly versus the gasoline generator we currently use. Finally we would like to build a mobile charger stand for outreach events, to highlight our ability to create green energy solutions as a student-led team, and to give an easy-to-understand demonstration of solar energy.

Who will this project primarily impact?:

Please select the groups that your project is intended to impact:

Lexington Community

Undergraduate Students

The Environmental Stewardship Fee is a \$4 per semester student tuition fee. Given that the SSC is in charge of distributing these funds, please describe your project's plan to maximize student impact.: answer

What type of project is this?:

Career Development

Education



Please select up to three disciplinary categories that best describe your project.:

Campus Sustainability

Engineering

Solar/Energy

The SSC is always seeking further outreach opportunities. Please consider doing one or all of the following with your project to help us reach more people. :

Green Talks Radio segment (recommended)

Feature SSC logo on promotional material

Social Media Promotion

SSC Logo on Car, Trailer, a Race Apparel

Does this project require the approval of any outside or UK entity? If so, please check the box and include documentation of support at the end of this document.: No

Have this, or any related project, been funded by the SSC in this or previous years?: Yes

You indicated this, or a related project has been funded by the SSC in this or previous years. Please answer the following questions about that project. If the SSC has funded multiple projects in the last three years, please provide information for each one.:

Project	Year funded	Amount (round up to the nearest whole number)
FSGP 2019 Hotel and Transportation	2018	12,000
Gato del Sol VI High Efficiency motor and motor controller	2017	13,000
Gato del Sol VI High Efficiency Motor	2016	10,000
Gato del Sol VI Solar Array	2015	8,000





Please fill out an itemized budget for your project as it stands. Indicate line items that could be reduced with a check mark. Round up to the nearest whole number for numerical entries.:

Category: Other

Item name: Gato Del Sol VII Solar Panels

Amount requested from outside the SSC: 17,000

Amount requested from the SSC: 7,000

Name of other funding source: UK College of Engineering, Department of Alumni

Total cost: 24,000

Would you be willing to accept reductions in your line items? (Leave blank if the answer is no): No

Category: Registration

Item name: ASC 2020 Race Registration

Amount requested from the SSC: 3,000

Amount requested from outside the SSC: 5,000

Name of other funding source: UK College of Engineering, Department of Alumni

Total cost: 8,000

Would you be willing to accept reductions in your line items? (Leave blank if the answer is no): No

Category: Other

Item name: Trailer Solar Array

Amount requested from outside the SSC: 0

Amount requested from the SSC: 2,800

Name of other funding source: Total cost: Would you be willing to accept reductions in your line items? (Leave blank if the answer is no): No

Category: Other

Item name: Mobile Power

Amount requested from the SSC: 200

Amount requested from outside the SSC: 0

Name of other funding source: Total cost: Would you be willing to accept reductions in your line items? (Leave blank if the answer is no): No



Please describe who will be in charge of dispensing the funds. If it is not a UK department, how will the funds be dispensed?: The UK College of Engineering, Department for Mechanical Engineering is responsible dispensation of funds.

Does this project have any additional funding partners? If so please list them and briefly describe their contribution and involvement.: The College of Engineering is another major funding partner for the solar cells.

Estimated project completion date: 01/31/2021

Please provide a list of the major milestones of your project.: Gato Del Sol VII Solar Panels , Trailer Solar Panels, Mobile Charger Solar Panels and electronic equipment for mobile linkage

Include the date (mm/dd/yy) and a brief description of the event. This should include all relevant events to your proposals, such as dates for completion of key project milestones, presentations, or final project completion.:

Date	Event title	Brief description
01/31/2021	Gato VII Solar Panel built	Finished construction and application of UK Solar Car Panel
05/25/2020	Trailer Panel built	Solar panels built and attached to trailer
12/15/2019	Mobile Charger built	Mobile charger built and available for outreach
03/15/2020	Race Fees	Race fee payment confirmed.



If your project timeline is greater than a month, please provide a date around the middle of the project when sufficient progress will have been made to update the SSC.:

08/31/2020

Please attach supporting documents such as promotional material, letters of collaborative funding, or a budget spreadsheet, in addition to the budget provided previously. If you are working in partnership with a UK entity such as the Physical Plant Division, an academic department, etc., their letter of support should be uploaded here as well. Please only attach documents necessary to your proposal, so documents such as individual resumes or cover letters should not be included. All supporting documents should be in PDF format.:



Supporter Tier System

Wildcat (\$25,000+)

- Wildcat Level decal on each side of the car and trailer
- Wildcat Level sized logo on race t-shirt
- Wildcat logo on website and in – depth feature of company on website along with hyperlink
- Car and team is available for two presentations at company events or company related community events with notice*
- Company logo goes on website footer
- Recognition of company on UKSC social media

Gold (\$10,000 - \$24,999)

- Gold Level decal on each side of the car and trailer
- Gold Level sized logo on race t-shirt
- Gold Level logo and hyperlink and description on website
- Car and team is available for one presentation at company events or company related community events with notice*
- Recognition of company on UKSC social media

Silver (\$5,000 - \$9,999)

- Silver Level decal on each side of the car and trailer
- Silver Level sized logo on race t-shirt
- Silver Level logo and hyperlink and description on website
- Recognition of company on UKSC social media

Bronze (\$1,000 - \$4,999)

- Bronze Level decal on each side of the car and trailer
- Bronze Level logo and hyperlink and description on website
- Recognition of Bronze Supporters on UKSC social media

* Subject to availability and schedule of the team. Team can travel within a 200 mile radius of Lexington, KY.