



STUDENT SUSTAINABILITY COMMITTEE

Semesterly Report

Thank you for your commitment to green initiatives at the University of Illinois. One of the ongoing requirements listed in the terms of the funding agreement for your project is the submission of semesterly reports with key information about your project. In addition to this form, please provide additional financial documentation and/or progress photos if available.

Please be as accurate as possible in describing the project (including possible setbacks or challenges in meeting the initial goals of the project). Not fully meeting your project's goals will not disqualify you from making future funding requests as long as your reports are as complete and accurate as possible. If you have any questions, please contact the Student Sustainability Committee, at sustainability-committee@illinois.edu.

Project Name: InSPIRE SPOT Project

Date of Report Submission: 12/19/2019

Project Purpose:

Creation of a solar powered outdoors table (SPOT) with USB and outlets. Promote solar energy to the public by giving them the opportunity to view and use solar panels to charge their devices. Also to reduce greenhouse gas emissions by reducing the use of electricity from the grid and increasing use of renewable solar energy. The last purpose is to give the team constructing the project real life engineering design experience and technical knowledge on solar energy systems.

Detailed Accounting of Expenditures to Date:

All expenditures for this semester are listed in the purchases lists in the appendices. They may not have been bought yet. Our faculty advisor is planning to purchase them during winter break.

Project Progress to Date:

We have completed the design of the grounding system and made few changes to the over structural design in order to add stability and safety. We have searched for potential locations for the project and are working with ECEB officials to potentially place the system on a location near ECEB. We have also searched for specific items that we will purchase and are near completion of a final purchase list. Lastly, we are working with F&S to contact the appropriate people around campus for location searches outside ECEB area.

Student Involvement and Outreach to Date:

Student inspire build team (consisting of more than 15 official members and 8 regular members

) have worked on the system with guidance from ECE power electronics professor Phillip Krein and the department of facilities and services in UIUC. From this they have acquired technical knowledge on solar energy systems and have gained skills related to wood-working, concrete work and the use of power tools. The remaining branches of InSPIRE have used this technical knowledge on solar energy systems and have conducted short presentations on the basic of building all those interested in the student body of UIUC.

Marketing and Promotion Efforts to Date:

The SPOT project has been presented to interested students in presentations made by InSPIRE as well as a booth in the yearly Engineering Open House events.

Additional Comments:

N/A

General Items				
Item	Cost/Unit	Qt	Cost	Link to store
Cam Lock	\$14.65	1	\$14.65	https://www.amazon.com/dp/B000W7DBWA/ref=psc
Solar Mounts	\$259.20	1	\$259.20	https://www.solaris-shop.com/tamarack-solar-uni-t
4ft Pole	\$32.75	1	\$32.75	https://www.grainger.com/product/BECK-3-1-2-x-4-t
4in dia drill bit	\$22.55	1	\$22.55	https://www.homedepot.com/p/Stalwart-16-Piece-H
Buy Table grounding Clamp	\$13.50	2	\$27.00	https://dirtbolt.com/product/hellanker-40x400-ground
Total			\$356.15	

Electrical Grounding System Purchase list

Item	Cost per unit	Qt	Total Cost	Link
Grounding Rod Clamp	\$2.35	4	\$9.40	https://www.homedepot.com/p/Blackburn-1-2-in-Type-G-Grou
6 awg bare solid grounding wire	\$20.96	1	\$20.96	https://www.homedepot.com/p/Southwire-25-ft-6-Gauge-Solid
Normal grounding lugs	\$3.15	3	\$9.45	https://www.zoro.com/burndy-mechanical-conn-lay-in-lug-10-t
Bus Bar	\$3.99	1	\$3.99	https://www.westmarine.com/buy/blue-sea-systems--100a-min
12 awg stranded wire	\$7.77	1	\$7.77	https://www.homedepot.com/p/Southwire-25-ft-12-Green-Stran
Total			\$51.57	

Estimated Sub-Total	\$407.72
Sub-Total	
Taxes	
Shipping	
Other fees	
Post-Purchase Total	