

# Spring 2016 Campus Sustainability Fund Proposal

**Mobile Solar Education Center**

**Valerie Hoffman**

**\$445.18**

## **Project Summary**

### **Goals:**

To show directly how solar energy is created in a mobile unit. This can be used as an education tool to the college. The solar panel is currently in storage and is not collecting any energy, so creating a mobile education center it would give the solar panel a purpose.

### **Project Justification and Relevance:**

A solar array was installed in 2015 on the library roof. There is a display working solar panel that is fully capable of producing energy. The teachers of Paul Smith's College purchased the first solar panel that is used as a display. This can easily be transformed into an education tool.

### **Methods:**

I will put together the system using my background knowledge in electrical engineering along with the guidance from instruction manuals and support from Kate Glenn and Dave Simmons. The future of the mobile education center has not been decided but it could make a home on display the Paul Smith's College Visitors Interpretative Center(V.I.C.) or stay on campus and be used in events like graduation, welcome week and other festivities. Although it does not have to stay in one place it can be used in classrooms and around campus.

## **Project Budget and Timeline**

### **Budget table:**

<b>Product</b>	<b>Store</b>	<b>Price</b>	<b>Why</b>
12V Deep Cycle Battery Part no. 24DC-2	Advanced Auto Parts	\$125.99	Store electricity
250W Solar Panel	Already purchased	\$0.00	Produce electricity
LED Message Bar	Already purchased	\$0.00	Output of electricity
900W Microinverter Part no. 806-1210	www.roadauto.com	\$228.50	Short circuit protection, use the electricity, display , all climate
30 Amp digital Charge Controller	The Home Depot	\$73.99	Prevent the battery from over charging
6in. MC4 to Bare conversion cable set	The Home Depot	\$16.70	Cable hook up

**Timeline:**

Week	Task
2-29	Get proposal approved
3-7	Order parts
3-14	Spring break
3-21	Build the system

**Follow Through**

The Campus Sustainability Office Energy Assistant will maintain and monitor the use and upkeep of the system under the direction of Kate Glenn.