MTSU Clean Energy Initiative Project Funding Request

There are five (5) sections of the request to complete before submitting. See http://www.mtsu.edu/~sga/cleanenergy.htm for funding guidelines.

1. General Information	
Name of Person Submitting Request :	Dr. Cliff Ricketts
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2. Project Categories (Select One)			
Select the category that best describes the project.			
.	Energy Conservation/Efficiency	.	Sustainable Design
X	Alternative Fuels		Other
.	Renewable Energy		

3. Project Information

a. Please provide a brief descriptive title for the project.
b. The project cost estimate is the expected cost of the project to be considered by the committee for approval, which may differ from the total project cost in the case of matching funding opportunities. **Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.**
c. List the source of project cost estimates.
d. Provide a brief explanation in response to question regarding previous funding.

3a. Project Title: Solar Electric Vehicle Charging Station

3b. Project Cost Estimate: $14,500.00

3c. Source of Estimate: Coulomb Technologies, Charge Point, Charge Net, and Ecotality

3d. If previous funding from this source was awarded, explain how this request differs? *Previous funding was hydrogen and natural gas.*

4. Project Description

(Completed in as much detail as possible.)

a. The scope of the work to be accomplished is a detailed description of project activities.
b. The benefit statement describes the advantages of the project as relates to the selected project category.
c. The location of the project includes the name of the building, department, and/or specific location of where the project will be conducted on campus.
d. List any departments you anticipate to be involved. Were any departments consulted in preparation of this request? Who? A listing may be attached to this form when submitted.
e. Provide specific information on anticipated student involvement or benefit.
f. Provide information for anticipated future operating and/or maintenance requirements occurring as a result of the proposed project.
g. Provide any additional comments or information that may be pertinent to approval of the project funding request.

4a. Scope: Work to be accomplished:

Installation of an electric vehicle charging station will be a vital service considering the release of the electric vehicles like the Nissan Leaf, the Chevy Volt, and Plug-In Hybrid Vehicles. The charging station will utilize our existing Solar System which is a partnership with the TVA's Green Power Switch, Generation Partners. Thus, we will end up with a solar charging station. An existing MTSU electric vehicle will be adapted to match the new charging station which will have quick charge option.

4b. Scope: Benefit Statement:

The charging station will be available to any MTSU student. It will be go beyond the scope of a regular charging station since it will be solar. It will also be an excellent public relation move for the university since the Nissan Leaf will be manufactured in Rutherford County. MTSU can be a model for the nation as we move to a greener environment.

4. Project Description (continued)

4c. Location of Project (Building, etc.):

The electric vehicle charging station will be installed on the exterior of the Vocational Agriculture Building so it will be accessible to students. It will be on the west side of the building at the corner, adjacent to the solar system and parking lot.

4d. Participants and Roles:

Any department is welcomed, but besides the School of Agribusiness & Agriscience and the Alternative Fuel class, the Engineering Technologies Department with their solar endeavors would be the most involved. Any student or university employee can participate. Tracy Woodard of Nissan Motor will be a great consultant. She is the director of public relations for the Nissan Leaf.

4e. Student participation and/or student benefit:

Students are available to use the system 24 hours a day. (Our solar charging station can be used at night or a cloudy day by partnering with TVA's Green Power Switch, Generation Partners Program.) This proposal supports two charging stations. Future request can expand the number of charging stations, if needed.

4f. Future Operating and/or Maintenance Requirements:

These will be minimal and a non-issue.

4g. Additional Comments or Information Pertinent to the Proposed Project:

It is the believe of the requestor that this proposal is in line with the orginal intent of the Green Energy Fee/Clean Energy Initiative of creating a cleaner environment, energy conservation, etc.

5. Project Performance Information

Provide information if applicable.

a. Provide information on estimated annual energy savings stated in units such as kW, kWh, Btu, gallons, etc.
b. Provide information on estimated annual energy cost savings in monetary terms.
c. Provide information on any annual operating or other cost savings in monetary terms. Be specific.
d. Provide information about any matching or supplementary funding opportunities that are available. Identify all sources and explain.

5a. Estimated Annual Energy Savings (Estimated in kW, kWh, Btu, etc.):

The potential savings are purely mathematical. Consider the following example: The Nissan Leaf goes 100 miles on a full charge. The Toyoto Prius which has been converted to a Plug-In Hybrid uses .33 kilowatts per mile. The price is .07 per kilowatt, thus, $2.28 cost for 100 miles. Gasoline at $2.50 per gallon would cost $10.00 for the same 100 miles. This results in a savings of $7.78.

5b. Annual Energy Cost Savings ($):

Two cars per day X 5 days X 100 miles= 10,000 miles X 52 weeks= 52,000 divided by 100 = 520 X $7.78(see above)= $4,045.60 annual savings.

5c. Annual Operating or Other Cost Savings. Specify. ($):

See 5a above

5d.Matching or Supplementary Funding (Identify and Explain):

The solar unit has already been installed at a cost of $65,000 dollars.