Rec 9/30/19

32

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.shtml for funding guidelines. Save completed form and email to cee@mtsu.edu or mail to MTSU Box 57.

1. Applicant Information

Name of person submitting request Linda Hardymon	
Department/Office CEE	Office phone # 615-904-8096
MTSU Box # 57	Cell phone # 615-519-8096
E-mail linda.hardymon@mtsu.edu	Submittal date 9/30/19

2. Project Category

Select the category that best describes the project

	Energy Conservation/Efficiency		Sustainable Design
	Alternative Fuels		Other
✓	Renewable Energy		

3. Project Information

a. Provide a brief descriptive title for the project
b. Provide the expected cost of the project, which may differ from the total project cost in the case of matching funding opportunities; **any funding request is a not-to-exceed amount, and any proposed expenditure above the requested amount will require a resubmission**
c. List the source of project cost estimate
d. Provide a brief explanation of any previous funding from the Clean Energy Initiative

3a. Project title Solar Picnic Table
3b. Project cost estimate $13,700
3c. Source of estimate Joe Robus, president of EnerFusion Inc.
3d. If previous funding from this source was awarded, explain how this request differs We were awarded our first solar picnic table in fall 2018, and it

was installed in the grassy are by the Honors building.

4. Project Scope

(Completed in as much detail as possible)

a. Provide a detailed description of project activities
b. Describe the advantages of the project in relation to the selected project category
c. Provide the building, department, and/or specific location of where the project will be conducted on campus
d. List any participants in the project—departments, professors, etc.—including any who were consulted in preparation of this request
e. Explain any anticipated student involvement and/or benefit
f. Explain future operating and/or maintenance requirements
g. Provide any additional comments or information that may be pertinent to approval of the project funding request

4a. Work to be accomplished

This project will provide picnic tables with solar-powered outlets to be placed around campus for use by MTSU students, faculty, staff, and visitors.

4b. Benefit statement

This project will bring awareness not only to solar energy but also to recycling, as poly-recycled plastic materials were integrated into the picnic table. Moreover, each solar umbrella will, at full capacity, generate 295 watts of clean power for its picnic table's outlets, reducing the load on other electrical outlets on campus.

4. Project Scope (continued)

4c. Location of project (building, etc.)

The location of this solar picnic table is TBD.

4d. Participants and roles

Project coordinator: Linda Hardymon

4e. Student participation and/or student benefit

This project will benefit students by providing a shaded outdoor area to study and a clean way to charge their phones and laptops.

4f. Future operating and/or maintenance requirements

More solar picnic tables may be purchased in the future.

4g. Additional pertinent information

N/A

5. Project Performance

Provide information if applicable

a. Estimate annual energy savings in units such as kW, kWh, Btu, gallons, etc.
b. Estimate annual energy cost savings in monetary terms
c. Provide information on any annual operating or other specified cost savings in monetary terms
d. Provide information about any matching or supplementary funding opportunities available, identifying and explaining all sources

5a. Annual energy savings (in kW, kWh, Btu, etc.)

Each umbrella could save 0.295 kW, or 3.54 kWh, per day.

5b. Annual energy cost savings ($)

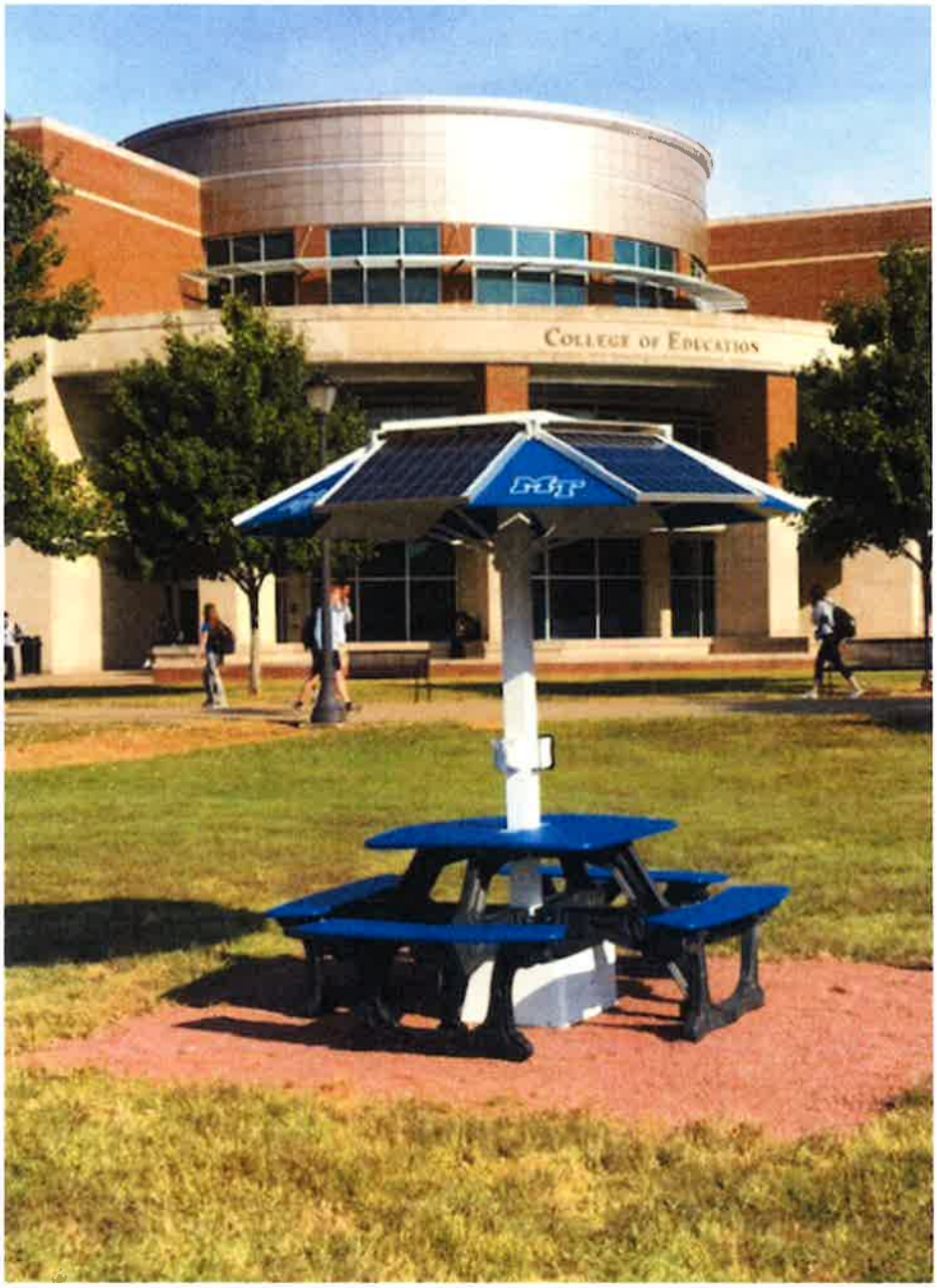
Each umbrella could save $.354 per day, or $95.58 per academic year.

5c. Annual operating or other specified cost savings ($)

No associated utility costs for the umbrellas.

5d. Matching or supplementary funding ($)

Energy and savings calculations:
Finding kW: 295 watts = 0.295 kW generated by each umbrella at full capacity
Finding kWh: On for 12 hours each day —> 0.295kw * 12 h = 3.54 kWh per day
Finding cost savings (assuming electricity costs $.10/kWh): 3.54 kWh * $.10/kWh = $.354 saved per day per umbrella —> $95.58 saved per academic year (assuming 270 days long) per umbrella



Installed Oct 2019