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10/1/2020

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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. General Information	
Name of Person Submitting Request Linda Hardymon	
Department/Office CEE	Phone # (Office) 615-904-8096
MTSU Box # 57	Phone # (Cell) 615-519-8096
E-mail linda.hardymon@mtsu.edu	Submittal Date 9/30/2020

2. Project Categories (Select One)	
Select the category that best describes the project.	
<input type="checkbox"/> Energy Conservation/Efficiency	<input type="checkbox"/> Sustainable Design
<input type="checkbox"/> Alternative Fuels	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Renewable Energy	

3. Project Information	
<p>a. Please provide a brief descriptive title for the project.</p> <p>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.</p> <p>c. List the source of project cost estimates.</p> <p>d. Provide a brief explanation in response to question regarding previous funding.</p>	
3a. Project Title Solar Picnic Table	
3b. Project Cost Estimate \$14300.00	
3c. Source of Estimate Joe Robus, EnerFusion	
3d. If previous funding from this source was awarded, explain how this request differs? We were awarded the first table in 2018 and the second in 2019. They are both installed in the grassy area by the Honors building.	

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

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

4b. Scope: Benefit Statement

This project will bring awareness not only to solar energy but also to recycling, as poly-recycled materials were intergrated 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 Description (continued)
<p>4c. Location of Project (Building, etc.) The location of this solar picnic table is TBD.</p>
<p>4d. Participants and Roles Project coordinator : Linda Hardymon</p>
<p>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.</p>
<p>4f. Future Operating and/or Maintenance Requirements More solar tables may be purchased in the future.</p>
<p>4g. Additional Comments or Information Pertinent to the Proposed Project N/A</p>

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.)

Each umbrella could save .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 Cost Savings. Specify. (\$)

No associated utility cost for the umbrellas.

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

Energy and saving calculations:

Finding kW: 295watts = .295kW generated by each umbrella at full capacity

Finding kWh: on for 12hr each day -> .295kw * 12 h = 3.54 kWh per day

Finding cost savings (w/electrical cost \$.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



EnerFusion Inc.
 1601 Hults Dr.
 Eaton Rapids, MI 48827

(844)-8Power-UP
 www.enerfusioninc.com

Plus \$1000.⁰⁰
 for concrete
 pad
 \$14300.00
 with overhead

Quote Name MTSU-10012020-1D
 Prepared By Joseph Kobus II
 Phone (844) 876-9378 Ext. 1
 Email joe@enerfusioninc.com

Status Draft
 Created Date 10/01/2020
 Expiration Date 12/30/2020

Contact Name Linda Hardymon
 Email linda.hardymon@mtsu.edu

Bill To Name Middle Tennessee State University
 Bill To 1301 E Main St
 Murfreesboro, Tennessee 37132
 United States

Ship To Name Middle Tennessee State University
 Ship To United States

Product	Product Description	Quantity	Sales Price	Subtotal
Shipping W/ Turn-Key Installation	FOB Destination (Customer specified location.) with On-site "turn-key" installation.	1.00	\$0.00	\$0.00
Solar Power-Dok 2020	(1) Poly Recycled table with seating positions for 8 persons; ADA configuration available upon request (no additional charge) (4) 110 V/AC GFCI UL listed electrical outlets (4) USB type A power outlets - USB and 110VAC outlets powered with 600 watt continuous pure sine wave power with 1200 watt peak surge. (4) Qi enabled "Wireless" charging locations conveniently located on table top surfaces. (2) Canopy mounted ambient LED lights automatically operated at dusk. (2) Canopy mounted high intensity LED lights operated with push button and timer for machine use at night. - Umbrella style canopy. (3) 65 watt solar panels mounted on adjustable canopy (1) 100 watt panel mounted on the roof canopy with aluminum framing for additional support. - Adjustable angular settings for canopy umbrella for optimal solar exposure on panels (2) Robust Gel-Cell maintenance free batteries for solar energy storage for machine use day or night. - Visibly mounted solar charge controller with digital readout for display of solar energy production - Custom 2 color printed logo locations on "Sunbrella" awning panels (6) locations - True "Off the Grid" implementation with no required grid tied feed - 3 Year Manufacture Warranty on all parts and craftsmanship: EXCLUDING Batteries	1.00	\$11,995.00	\$11,995.00

- True "Off the Grid" implementation with no required grid tied feed.

Subtotal \$11,995.00
 Grand Total \$11,995.00

**50% down payment required to begin construction, unless prior



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arrangements have been made in writing**

Delivery 6-8 weeks from receipt of down payment

Thank you for the opportunity to serve your needs!!