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9/21/22

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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 Emerniece Cooper	
Department/Office Physician Assistant Studies	Phone # (Office) 615-494-7795 - Emerniece Cooper /615-494-7790
MTSU Box # 55	Phone # (Cell) 615-987-7934
E-mail ecc3r@mtmail.mtsu.edu Julie.Goodrich@mtsu.edu	Submittal Date 09/20/2022

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 Outdoor Tables (1) <i>CKN</i>
3b. Project Cost Estimate <i>\$15,590.</i>
3c. Source of Estimate Joe Robus, EnerFusion
3d. If previous funding from this source was awarded, explain how this request differs?
<small>We have received funding from this source for water refilling station projected, which was completed in 2021. This is the first request for installation of the table near the CKNB building, there are tables located on can</small>

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 solar outdoor tables that contain solar-powered charging stations and WIFI hotspots for MTSU students, faculty, staff and visitors. Providing this outdoor study area will be convenient for making students feel more comfortable considering the the recent pandemic.

4b. Scope: Benefit Statement

The addition of more Solar Power-Dok outdoor tables on campus will encourage an eco-friendly campus. The tables provide self-sustaining green energy when placed outside with access to direct sunlight. This will reduce the cost of electricity because they generate up to 295 watts of power. Even more, the Power-Dok is made from recycled material. The Power-Doks have stainless steel components, so they will require minimal maintenance.

4. Project Description (continued)
<p>4c. Location of Project (Building, etc.) Location of Project (Building, etc.) The solar outdoor tables will be located outside the main entrance of CKNB on the concrete patio area. This area requires no additional preparation for installation.</p>
<p>4d. Participants and Roles Project Facilitator - Emerniece Cooper Project Approver - Dr. Marie Patterson Assistant Project Facilitator - Julie Goodrich</p>
<p>4e. Student participation and/or student benefit The project will benefit all students by providing shaded study areas, phone, and laptop charging stations. The location is specifically beneficial for nursing, PA students, and students from other departments. Also, the tables are beneficial for students to spend more time outdoors. It is widely known that spending time outside is essential for improving mental health issues like anxiety and depression. Even more, this will help students to feel secure on campus in the midst of this pandemic.</p>
<p>4f. Future Operating and/or Maintenance Requirements Minimal maintenance is required for the solar Power-Dok tables. We are requesting for 1 solar table near the outside patio of the CKNB building. A concrete base is already there. The program is willing to cover any additional installation fees.</p>
<p>4g. Additional Comments or Information Pertinent to the Proposed Project N/A</p>

5. Project Performance Information

Provide information if applicable.

- Provide information on estimated annual energy savings stated in units such as kW, kWh, Btu, gallons, etc.
- Provide information on estimated annual energy cost savings in monetary terms.
- Provide information on any annual operating or other cost savings in monetary terms. Be specific.
- 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.)

Possible energy savings for each table is .295 kW or 3.54 kWh per day.

5b. Annual Energy COST Savings (\$)

Each outdoor study table could save up to \$95.58 per academic year.

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

There are no additional costs.

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

Finding kW: 295watts -- .295kW generated by each table

Finding kWh: 12hr a day usage --> .295kw * 12h = 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 per table.



ESTIMATE

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

DATE	EXPIRATION	ESTIMATE #
9/8/2022	12/12/2022	1244

BILL TO

Tennessee University
Middle Tennessee State
University
111 Cope Admin Bldg
Murfreesboro TN 37132 United
States

SHIP TO

Tennessee University
Middle Tennessee State
University
111 Cope Admin Bldg
Murfreesboro TN 37132 United
States

DESCRIPTION

QTY	RATE	AMOUNT
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Solar Power Dok - 2022

Product Description

- (1) Poly Recycled table with seating positions for 8 persons; ADA configuration available upon request (no additional charge)
- (2) 110 V/AC GFCI UL listed electrical outlets
- (2) USB Type "C" power outlets.
Dual-Port High-Speed 48 Watt USB-C Charger Ports
- * (1) 30W USB C Output: 5V □ 2.4 A / 9V □ 3A / 15V □ 2A / 20V □ 1.5A / 9V □ 2A / 12V □ 1.5A
- * (1) 18W USB C Output: 5V □ 2.4A / 9V □ 2A / 12V □ 1.5A
- * Use a USB-C to Lightning cable for Lightning devices with PowerIQ 3.0 fast charging, and use a USB-C to USB-C cable to charge your USB-C laptops.
- (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) 75 watt solar panels mounted on adjustable canopy
- (1) 130 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
- 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 with Bluetooth Connectivity
- 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 (2 Years)
- Marine grade wiring.
- Stainless steel fasteners.
- Structural elements constructed from aluminum and finished with polyester powder coating durable paint to customer specified colors.
- Custom branding available on beam surfaces (4) locations available.
- Easy to clean surfaces.
- WiFi connectivity options available upon customer request.

1.00	13,495.00	13,495.00
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Re-Order Discount

Discount for being a loyal customer; 5% off unit pricing

1.00	-674.75	-674.75
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Turn Key Installation

Delivered and Installed by Enerfusion Inc.

1.00	1,350.00	1,350.00
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SUBTOTAL	14,170.25
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***50% Deposit required for production to begin unless prior terms have been made.

TOTAL USD	14,170.25
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***Please allow 18-20 weeks for delivery from receipt of deposit.

***If not tax exempt taxes will be added to final invoice.