

RUC
10/11/18

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MTSU Clean Energy Initiative Project Funding Request

1. General Information	
Name of Person Submitting Request Linda Hardymon/Sydney Smith	
Department/Office Facilities Services	Phone # (Office) 615 904-8096
MTSU Box # 57	Phone # (Cell)
E-mail Linda.Hardymon@mtsu.edu	Submittal Date 10/5/18

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 Tables
3b. Project Cost Estimate \$13,194.50
3c. Source of Estimate Joe Robus, president of EnerFusion Inc.
3d. If previous funding from this source was awarded, explain how this request differs? N/A

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 to 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 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 Description (continued)
<p>4c. Location of Project (Building, etc.) The solar picnic tables will be located in outdoor areas around campus.</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 picnic tables may be purchased in the future.</p>
<p>4g. Additional Comments or Information Pertinent to the Proposed Project EnerFusion is having a sale on solar picnic tables from October 1 through the end of the year, in which shipping and installation are free. See the attached information.</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.)

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 Cost Savings. Specify. (\$)

No associated utility costs for the umbrellas.

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

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 --> $0.295\text{kW} * 12\text{ h} = 3.54\text{ kWh}$ per day

Finding cost savings (assuming electricity costs \$.10/kWh): $3.54\text{ kWh} * \$.10/\text{kWh} = \$.354$ saved per day per umbrella --> \$95.58 saved per academic year (assuming 270 days long) per umbrella



Solar Power-Dok

Go on, plug in GREEN!



Features of the Solar Power-Dok:

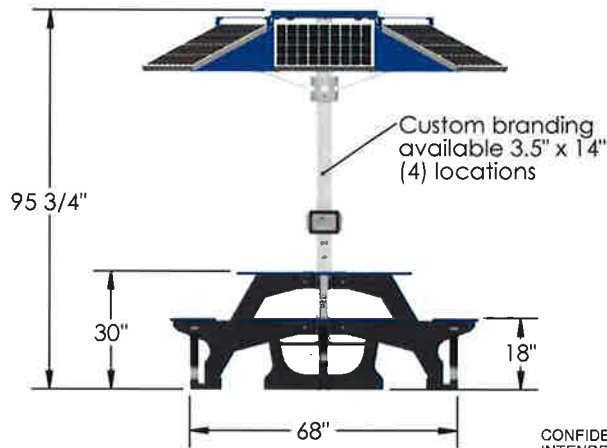
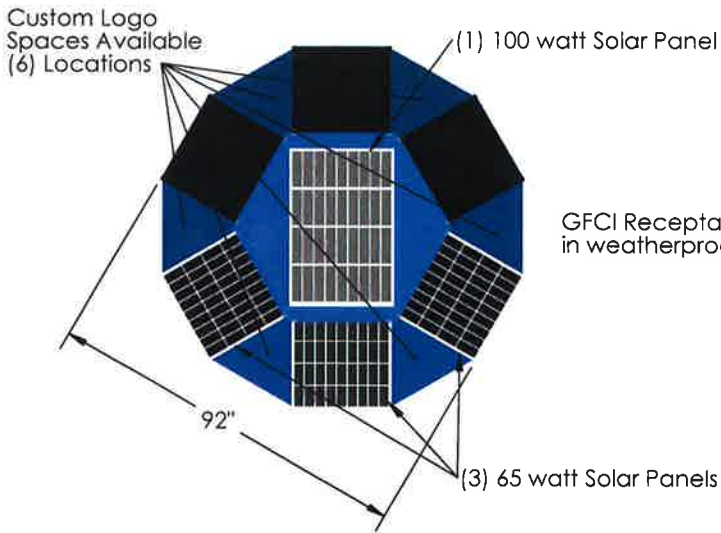
- Generates and stores electricity for use day or night for “Off the Grid” GREEN power!
- Provides (4) 110 vac 60 hz GFCI outlets and (4) USB Type “A” power outlets.
- Provides (4) Qi Wireless charging locations on table surface.
- High intensity LED lighting system with timer, operated with the push of a button.
- Ambient LED lighting operated automatically at dusk.
- (3) 65 Watt Solar Panels (1) 100 Watt Solar Panel, total capacity 295 watts power generation.
- 600 Watt continuous pure sine wave power, 1200 watt peak surge (10min).
- Robust capacity deep-cycle Gel Cell battery bank (216 Ah capacity).
- Provides surge protected electricity for your electronic devices.
- Adjustable angular settings for the umbrella to maximize the sun’s exposure on the solar panels for peak seasonal efficiency.
- Table constructed from poly-recycled plastic materials.
- Structural components constructed from Aluminum, thus preventing any potential for rusting of the structure as seen with other outdoor furnishings on the market.
- Stainless steel fasteners utilized for long lasting and rust-free securing of components.
- Solar charge controller with digital readouts to show power levels.
- Easy to clean surfaces.
- Umbrella surfaces can accommodate custom logos.
- Each product is fully customizable with many color choices available for table top, seat surfaces, structural aluminum components, and umbrella panel surfaces.
- “WiFi” connectivity available.
- Patent pending design
- The Solar Power-Dok is

Made in America!





The Solar Power-Dok so is much more than an ordinary picnic table, it is a solar-powered charging station and "WiFi" hotspot that is a great addition to any campus or outdoor venue. The Solar Power-Dok has been designed to provide self-sustaining GREEN energy wherever it is placed outdoors with access to direct sunlight. Not only is this electronic device charging oasis powered by the sun, it is also made from recycled materials to be an eco-friendly masterpiece.



ADA Accessible Configuration



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