## 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 Gary Routh							
Department/Office	Phone # (Office)						
Aerospace	615-428-0727						
MTSU Box #67	Phone # (Cell) 615-4280727						
E-mailgary.routh@mtsu.edu	Submittal Date 09-23-21						

2. Project Categories (Select One)								
Select the category that best describes the project.								
V	Energy Conservation/Efficiency		Sustainable Design					
	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

LED lighting aircraft maintenance labs

3b. Project Cost Estimate \$13,000

3c. Source of Estimate

# Forrest Higginbotham & Border States Lighting

3d. If previous funding from this source was awarded, explain how this request differs?

NA

### 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. S	cope:	Work	to be a	ccompli	ished					
Remo	ove old	high	mainte	ntance	flouresc	ents v	with	more	effiecient	LEDs.

4b. Scope: Benefit Statement
Our electricty usage should drop and at the same time increase brightness for our lab areas.

### 4. Project Description (continued)

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

These rooms are our aircraft powerplant lab and our aircraft sheet metal training and welding areas. Both activities reqiuire a lot of light for safe and precision fabrication and/or inspection of aircraft engine overhaul and components.

### 4d. Participants and Roles

Im submitting this as a facilties manager that has witnessed failures of the old flourescent bulb fixtures every semester. I see the professors aggravation with the unreliability of the old lighting and how short of life the bulbs have become. Students are our focus and we want them to have a great learning environment. Having a dark lab area hurts our efforts.

### 4e. Student participation and/or student benefit

The main participants or beneficiaries will be our students who are training in aircraft maintenance. Proper lab lighting will help increase learning and safety.

### 4f. Future Operating and/or Maintenance Requirements

New LEDs are a win win. They produce more light and are much less prone to needing mainrtenance. Another big plus is the energy savings.

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

Our old flourescents are also getting obsolete as far as finding bulbs. MTSU warehouse is currently out of our "HO" version and probably will not get anymore. We are also having holder and ballast failures. We are currently hoping to find a source for ballast but that may become difficult.

### 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.)

5b. Annual Energy COST Savings (\$)

5c. Annual Operating or Other Cost Savings. Specify. (\$)
It will also reduce cost because it is not involving repair work orders, personel driving from campus, chasing parts and phone calls consuming schedule. In other words not having flourescents will remove a distraction for many in faculty and support.

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