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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	
Ryan Cunningham	
Department/Office	Phone # (Office)
Center for Energy Efficiency	615-904-8096
MTSU Box #	Phone # (Cell)
Box 57, MTSU	931-434-2265
E-mail	Submittal Date
rjc3x@mtmail.mtsu.edu	9/29/2014

2. Project Categories (Select One)			
Select the category that best describes the project.			
<input checked="" type="checkbox"/>	Energy Conservation/Efficiency	<input type="checkbox"/>	Sustainable Design
<input checked="" type="checkbox"/>	Alternative Fuels	<input type="checkbox"/>	Other
<input 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	
Propane powered mower to replace old gas powered mower	
3b. Project Cost Estimate	
Total amount requested: \$12,045	

3c. Source of Estimate
TriGreen Equipment

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

There has been no previous funding from this source

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

Replacing the old mower with a John Deere Z930M Propane powered zero-turn mower. The MTSU grounds crew works to maintain all MTSU property. The university currently has 4 zero-turn gas powered mowers and a crew of 14 employees under Jason Young. One of the zero-turn mowers (over 10 years old) badly needs replacement as it is too old and worn out to do the job. The purchasing of a new propane powered zero-turn will replace the old mower, which will help keep MTSU looking its best at all times.

4b. Scope: Benefit Statement

The primary benefit of this project is to reduce annual operating costs. Additional benefits include lower fuel and maintenance costs, increased efficiency, and promoting environmental friendly methods on campus.

4. Project Description (continued)

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

MTOneStop, Student Union, MTSU Blvd parking garage, Rec Center, Honors College area and other high traffic areas. Jason states that the new mower will be used where the most students will see it.

4d. Participants and Roles

Jason Young will be in charge of operating and maintaining the new mower. Linda Hardymon will also oversee how the new mower is used.

4e. Student participation and/or student benefit

The propane powered mower would promote green energy on MTSU's campus and encourage students to "go green" while being able to see their green money being put to good use. Also, propane engines are very quiet and would be less disturbing to students/teachers across campus.

4f. Future Operating and/or Maintenance Requirements

Low maintenance requirements (less oil changes)

Propane is more efficient therefore less fill-ups. The spare tanks could be filled and stored for later use.

Propane mowers can cut fuel and maintenance costs by 30-40%.

They are easier to store during the winter (doesn't corrode engine unlike gas systems)

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

Energy efficiency is a growing thing on college campuses across the U.S. The purchase of the propane powered mower will provide students with an education of energy efficiency on and off campus.

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.)

A propane mower is 30% more efficient and cost less per hour of mowing.

5b. Annual Energy COST Savings (\$)

Fuel savings were calculated to be \$2291.25 annually

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

Lower annual maintenance requirements reduce operating costs (no oil changes). Fuel prices of propane compared to gasoline average 40% lower. Propane powered engines last longer than gas. Zero-emission means savings on environmental impact as well.

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

N/A