

Rec 10/2/14

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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 Dr. Cliff Ricketts	
Department/Office Agribusiness & Agriscience	Phone # (Office) 615-898-2430
MTSU Box # 5	Phone # (Cell) 615-308-7605
E-mail Cliff.Ricketts@mtsu.edu	Submittal Date October 3, 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 checked="" type="checkbox"/> Renewable Energy	

3. Project Information
<ul style="list-style-type: none"> 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 Running Vehicles off Wood.
3b. Project Cost Estimate \$9,500
3c. Source of Estimate Google Research
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

A pick-up (used) will be purchased. The appropriate device will be installed in the bed of the truck. The engine will be made to use wood by-products.

4b. Scope: Benefit Statement

In Middle Tennessee, there is an abundance of wood that is renewable. Tree's used for wood can be grown on hilly lands making it viable so it does not take away from cropland. In the Tennessee area there is an abundant amount of wood that can be removed from different areas.

4. Project Description (continued)
<p data-bbox="261 260 841 296">4c. Location of Project (Building, etc.)</p> <p data-bbox="250 331 1321 436">The project will be completed in the Agricultural Education Alternative Fuel Lab. The project will be done in the School of Agribusiness and Agriscience.</p>
<p data-bbox="261 512 662 548">4d. Participants and Roles</p> <p data-bbox="250 575 1338 680">The School of Agribusiness and Agriscience will be the leader of the project. The Engineering Technology program will be consulted as needed as well as the Chemistry Department.</p>
<p data-bbox="261 848 997 884">4e. Student participation and/or student benefit</p> <p data-bbox="250 932 1338 1037">Students will be doing the work on the project that have taken the Alternative Fuel Class (ABAS 4240). Also, students must be enrolled in Special Problems in Agriculture (ABAS 4910).</p>
<p data-bbox="261 1205 1110 1241">4f. Future Operating and/or Maintenance Requirements</p> <p data-bbox="250 1289 1338 1394">The future maintenance and operation will not be different from any of the other vehicles. Constant surveillance will be needed for optimal performance.</p>
<p data-bbox="261 1530 1289 1604">4g. Additional Comments or Information Pertinent to the Proposed Project</p> <p data-bbox="250 1640 1338 1787">previous alternative fuels have been completed successfully over the past thirty years: ethanol from corn, methane from cow manure, solar electric truck, solar/hydrogen from sun and water vehicles, solar/hydrogen hybrid, plug-in hybrid, and natural gas vehicles.</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.)

A vehicle has been driven 300 miles per week averaging 20 miles per gallon would save approximately \$45.00 per week or \$2,340.00 per year.

5b. Annual Energy COST Savings (\$)

\$2,340.00 per vehicle.

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

See above.

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

Some funding in the past has been received by Tactor Supply Company. The funding from TSC this year is designated for a biodiesel project. This project was designed to run cars off of animal fats and plant matter. A group is testing our finished project by driving on a coastal trip from Key West, Florida to Seattle, Washington.