

Rec 2/18/16



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 Chad Mullis	
Department/Office Information Technology Division	Phone # (Office) (615) 494-7647
MTSU Box # CAB 003	Phone # (Cell)
E-mail chad.mullis@mtsu.edu	Submittal Date 02/18/2016

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 type="checkbox"/> Alternative Fuels	<input type="checkbox"/> Other
<input 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 Student Virtual Desktop Infrastructure Thin Clients
3b. Project Cost Estimate \$12,500
3c. Source of Estimate Quote from Dell, Inc.
3d. If previous funding from this source was awarded, explain how this request differs? This request differs from previous applications since it involves deploying a

new Dell Wyse 5212 all-in-one thin client made available only recently. ITD only began testing these new thin clients earlier year.

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

Over the past two semesters, ITD successfully deployed Dell Wyse Z50 series thin clients to run student virtual desktops in classrooms and labs, including all computer labs in the student dormitories and classrooms in Honors Building, Peck Hall, Stark Agribusiness/Agriscience, Murphy Center, Kirksey Old Main, and Student Union Building.

While we can assemble and deploy the Z50 series much faster than traditional desktops, the newer Dell Wyse 5212 series feature an all-in-one design that makes deployment even faster since the computer and monitor come assembled in one unit. The 5212 also reduces cabling requirements since it does not require a monitor with separate power supply and video cables.

ITD already deployed 6 Dell Wyse 5212 units in the MT OneStop and would like to introduce 25 more of these units in classrooms prior to next semester.

4b. Scope: Benefit Statement

Based on information available online [here](#) and [here](#), we estimate the project will reduce the electrical costs of a standard classroom desktop computer, such as a Dell Optiplex 980 with monitor, from approximately 60-70 watts during normal use to < 27 watts with a Dell Wyse 5212 thin client.

4. Project Description (continued)**4c. Location of Project (Building, etc.)**

Classroom and lab computers managed by ITD in various buildings.

4d. Participants and Roles

Enterprise Server Services and Client Services, Information Technology Division – implementation and management

4e. Student participation and/or student benefit

This project directly lowers the operating cost of the University thereby providing an opportunity for the University to reduce the utility costs passed on to students.

4f. Future Operating and/or Maintenance Requirements

The equipment has an estimated useful life time of 5-7 years. Maintenance costs are included as part of the purchase expense.

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

This application relates to a larger multi-year project to reduce the operating costs in the University's classrooms. ITD estimates that it will be able to reduce power demands by at least 50% by the end of the project.

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.)

Power: ~4,106.25kWh

5b. Annual Energy COST Savings (\$)

Power: ~\$410.50

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

Total: ~\$410.50

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

ITD and TAF already purchased Wyse thin clients for classroom and computer lab usage and 7 Wyse 5212 thin clients for testing and use in the MT OneStop.