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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](mailto:cee@mtsu.edu) or mail to MTSU Box 57.

1. General Information	
Name of Person Submitting Request Jason Young	
Department/Office Grounds Services	Phone # (Office) 615-904-8316
MTSU Box # <b>32</b>	Phone # (Cell) 615-533-4816
E-mail <a href="mailto:jyoung@mtsu.edu">jyoung@mtsu.edu</a>	Submittal Date 9-29-21

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 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. <b>Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.</b></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 Electric Auto-Mower
3b. Project Cost Estimate <b>\$12,800</b>
3c. Source of Estimate <b>Quote from the dealer</b>
3d. If previous funding from this source was awarded, explain how this request differs?



#### 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 is for the purchase of 4 Husqvarna Automowers.

##### 4b. Scope: Benefit Statement

The automower is fully electric! It is fully autonomous and can mow on any schedule it is programmed to. The automower cuts the grass more frequently and by cutting just a little bit of the blade more often, leads to more efficient cutting and healthier grass.

<b>4. Project Description (continued)</b>
<b>4c. Location of Project (Building, etc.)</b>  Mowers will be used to cut Fields 1 and 2 on the intramural fields.
<b>4d. Participants and Roles</b>  Facilities Services, Grounds Services, and CEE. Grounds Services will maintain the mowers.
<b>4e. Student participation and/or student benefit</b>  The quality of the intramural fields playing surfaces will improve and students will see the mowers and see the efforts to use cleaner energy equipment.
<b>4f. Future Operating and/or Maintenance Requirements</b>  Routine maintenance. Grounds Services will provide all service to the machines.
<b>4g. Additional Comments or Information Pertinent to the Proposed Project</b>

**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. (\$)

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

Will save on the cost of fuel since the mowers are fully electric.



**Husqvarna**  
READY WHEN YOU ARE

# HUSQVARNA AUTOMOWER®



## HOW IT WORKS!

To cut a little and often is what leads to more efficient cutting and healthier grass.

### PRINCIPAL FUNCTION

- Unattended mowing
- Mow little but efficiently and frequently
- Good performance even in wet weather

### COLLISION AND LIFT SENSORS

Collision and lift sensors increase safety. When the mower runs into an object, it will reverse, turn, and choose another direction. If it is lifted, the blades and mower will stop immediately.

### NAVIGATION

- The boundary and guide wires are staked to the lawn or buried just below the surface. A staked wire disappears into the lawn in a few weeks.
- The mower stays inside the boundary wire laid around the perimeter of the working area.
- The charging station transmits a signal to the wire that guides the mower where to cut and also guides it back to the charging station.

### BOUNDARY WIRE

### RECHARGING

When it's time to recharge, the mower finds the charger by one of three methods:

1. By picking up signal from the charge station antenna.
2. By following the guide wire back to the charging station.
3. By following the boundary wire until within reach of the charge station.

### GUIDE WIRE

### EFFICIENT CUTTING TECHNIQUE

- The grass is cut with three fine, razor-sharp blades.
- The three free-hanging blades are mounted on a disc and are easily replaced.
- The blades rotate back into the disc to minimize damage, should they hit hard objects- stones, branches, etc.
- The grass clippings are fine and do not need to be collected.

### MOWING CYCLE

- The concept is to keep short grass short
- Husqvarna AutoMower®
- Finds the charging station automatically.
- Charges for approximately 60 minutes.
- Resumes mowing- day in and day out.

### UNSURPASSED CUTTING RESULT

Husqvarna AutoMower® uses razor-sharp blades to cut every blade of grass, resulting in a lush, green lawn that conventional blades cannot achieve. The grass clippings become a natural fertilizer, helping keep lawns lush, green, and weed free.

### IRREGULAR MOVEMENT PATTERN

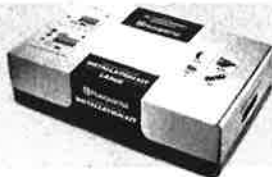
- No need for specific programming
- Covers all parts even if the lawn is complex and/or contains trees, flowerbeds, narrow passages, etc. Some models are aided by GPS.
- Allows the grass to get cut from different directions. Creates a smooth carpet-like surface.

### EASY TO SET UP

The working area and areas you want your Husqvarna AutoMower® to avoid are defined by a boundary wire, which is easily laid out around the perimeter of the cutting area. Please go to [www.husqvarna.com](http://www.husqvarna.com) to learn more.

## AUTOMOWER® INSTALLATION

The AutoMower® robotic mower can be installed on a variety of properties. Contact your local Husqvarna dealer for more information.



**FOR INSTALLATION SERVICES & PRICING,  
PLEASE CONTACT YOUR LOCAL DEALER**



## HUSQVARNA AUTOMOWER® CONNECT

Available from the AppStore or GooglePlay. Start, stop, and park your mower. Check and adjust settings, and receive notifications of mower status.

**HUSQVARNA AUTOMOWER®  
IS COMPATIBLE WITH AMAZON ALEXA  
AND GOOGLE HOME**

