



**Division of Campus
Planning, Infrastructure,
and Facilities**
Sterrett Center
230 Sterrett Drive
Blacksburg, Virginia 24061

GREEN RFP SUBMISSION FORM

Part I- General Information:

Name of Student Organization	MGT 2354 - Team 7
Contact/Responsible Person	Lowell Jessee
Contact Office Held/Title	Senior Energy Engineer
Contact Email Address	ljesssee@vt.edu
Contact Telephone Number	540-231-7305

Part II- Project Cost Information

Estimated Cost of this Proposal See III.C. below

Estimated Savings - See III.D. below

Net Cost of this Proposal =

Part III- Supporting Information

A. Please describe your climate action, sustainability, and/or energy initiative and attach supporting documentation.

Our proposed plan of action is the installation of occupancy sensors in Shanks Hall. See attached response to RFP for further information.

B. How does this initiative help to achieve the goals of the Virginia Tech 2020 Climate Action Commitment Resolution and Sustainability Plan?

Supports Virginia Tech's Climate Action Commitment:

- Goal 4: Reduce Building Energy Consumption to Enable Carbon Neutrality by 2030
- Goal 12: Diminish Barriers to Sustainable Behaviors through Institutional Change, Education and Social Marketing

Supports Virginia Tech's Amended Climate Action Commitment:

- Amendment 6a: Achieving LEED Silver certification or better for all eligible and applicable new buildings and major renovations.

The implementation of occupancy sensors within the classroom will apply to a multitude of goals of sustainability that Virginia Tech is striving to achieve in its Climate Action Commitment. Ultimately not only does this project allow for Virginia Tech to become a more energy-efficient university along with saving money in the long run, but most importantly becoming the leading example of sustainability across, not only in Virginia but across the country.

Attachment # 2

- C. What is the cost of your proposal? Please describe in adequate detail the basis for your cost estimate.

The average sensor costs about \$140. The sensor we recommend, Wattstopper-Dual Compatibility, costs \$162.17 and the total cost of all sensors would be about \$1200 with tax. Installation costs are estimated at \$1,800 with a 10% contingency of \$500 brings the total cost to \$3,500.

- D. Will your proposal produce cost savings for the university? If so, how much? Please describe in adequate detail the basis for your savings estimate.

When calculating potential savings on lighting and HVAC, we wanted to maximize the amount of money that the university could save when it came to yearly utility expenditures and energy usage. Virginia Tech stands to save about \$100 a year on cooling and about \$263 on heating with the installation of occupancy sensors. We predict to decrease Virginia Tech's annual lighting operating expenses by \$425 for the proposed area. With these assumed predictions, we predict to produce \$788 of cost savings with the installation of occupancy sensors in the proposed area. See attached response to RFP for further information.

- E. Is this funding request for a one-time need or an ongoing need (please mark one)?

One-Time X

Ongoing _____

- F. Is funding available for this request from another source? If yes, describe the funding (source, amount, etc.).

Unfortunately, our team has not been able to identify any avenues of alternate funding for the university in connection with occupancy sensor projects. See attached response to RFP for more information.

**GREEN RFP SUBMISSION FORM
(Continued)**

Part IV- Requestors/Reviewers

Prepared By: Hunter Wadsworth, Shawn Dumais, Maddie Bates, Aleylna Allibhai-Mawani, &
Andrew Hinman

Date 11/18/2021

Reviewed By: Lowell Jessee

Date 11/18/2021

Reviewed By: Nathan King

Date 11/18/2021

**GREEN RFP SUBMISSION
CONTACT LIST**

In the preparation of your Green RFP form, student organizations are encouraged to seek input and guidance from the following list of university employees. These individuals are familiar with the form and the process. They can address the feasibility of your proposal, provide a technical review, and evaluate the cost & potential savings.

<u>Area of Expertise</u>	<u>Name</u>	<u>Title</u>	<u>Email Address</u>
Engineering & Operations, Energy Management	Steve Durfee	Campus Energy Manager	sdurfee@vt.edu
Facilities: Housing & Residence Life	Todd Pignataro	Associate Director of Facilities	ptodd@vt.edu
Facilities: Buildings & Grounds (Small Renovations)	Jim McDaniel	Project Coordinator	jmcdani@vt.edu
Exterior Lighting	Matt Hagy	Associate Director of Utilities	mhagy1@vt.edu
Student Engagement & Campus Life	Spencer Stidd	Associate Director for Event Services	sstidd@vt.edu
Dining Services & Housing (Student Affairs)	Blake Bensman	Sustainability Manager	bensman@vt.edu
Alternative Transportation (Bus, Bike, & Walk/EVs)	Nick Quint	Transportation Network Manager	nquint@vt.edu
Landscape Architecture	Jack Rosenberger	Campus Landscape Architect	jrosenb@vt.edu
Hahn Horticulture Garden	Scott Douglas	Director/Instructor	dsd1@vt.edu
Recycling & Waste Management	Teresa Sweeney	Program Consultant	msrecycle247@vt.edu
Other Sustainability Topics	Nathan King	Campus Sustainability Manager	naking@vt.edu