

SUSTAINABILITY INITIATIVES BY STUDENT ORGANIZATIONS FUNDING PROPOSAL

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|-------------------------------------|-----------------------------------|
| Name of Student Organization | Virginia Tech Rescue Squad (VTRS) |
| Contact/Responsible Person | Jake Thomas Martin |
| Contact Office Held/Title | Chief |
| Contact Email Address | vtrschief@vt.edu |
| Contact Telephone Number | (804) 921-4356 |

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|----------------------------------|-----------------------------|----------------|
| Estimate Cost of this Proposal | \$8,544.58 | See Part III.C |
| Estimated Savings – | \$1,361.17/year | See Part III.D |
| Net Cost of this Proposal | 0.00 after 6.3 years | |

A. Please describe your sustainability initiative and attach supporting documentation.

The VTRS is requesting to replace our current fluorescent light fixtures with eco-friendly LED light fixtures. The VTRS operates 24/7, 365 days each year and has 34 fluorescent light fixtures to support our 3,254 sq ft facility. Many of these lights are never turned off due to the around the clock nature of emergency medical services. We are requesting funds from the university to significantly reduce maintenance and energy costs paid for by the university while simultaneously supporting the VT Climate Action Committee Resolution and Sustainability Plan.

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

The VTRS embodies the spirit of Virginia Tech by its members' commitment to service and sustainability. We have looked for many solutions to reduce our carbon footprint and reduce energy consumption over the years. This proposal supports multiple entities within the university and the environmental impact our service has. Fluorescent lights require much more energy, maintenance, and have a larger carbon footprint when compared to LED lights. We would like to continue to lead the initiative for sustainability within the field of public safety.

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

The initial cost of installing LED lighting for 34 fixtures is approximately \$7,430.07. Representatives from VT Energy Engineering and State Electric Supply Co. have quoted both material and labor with a 15% contingency adjustment to reach this figure. The fixtures were individually evaluated by the representatives to include the replacement of current worn and damaged pieces within the quoted materials that are needed, attached. The VTRS has a variety of fixtures to support the varying needs of the spaces within our station hence the different quoted fixtures.

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.

The calculated amount of energy savings per year is variable based upon the usage of each space within the rescue, documentation attached. The average annual savings after installation is estimated to be \$1,361.17/year. The payback period based solely on energy savings is 6.3 years. At 20 years, the university would net gain \$20,508.74 continue to save funds.

E. Is this funding request an Ongoing or One-Time change (please check one)?

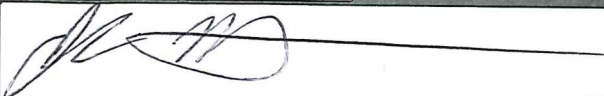
One-time

Ongoing

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

The VTRS has an operating budget that is reserved for medical equipment, vehicles, fuel, training, and many other necessities for our operations. The VTRS does not plan to use these funds to install LED lighting, as our funds are reserved for maintenance of current facilities, future purchases, and improvements in clinical care. The VTRS is allocated approximately 280k/yr of operating funds from the student health fee, in which 30-40% is saved for future capital replacement purchases (ambulances, response vehicles, cardiac monitors, etc.) The VTRS does not fund energy or maintenance costs for our facility as ENG state funds cover the expenses.

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| Part IV- Requestors/Reviewers | |
|---|--------------------------------|
|  Prepared By (Name of Contact for Student Organization) | Jake Martin Date 11-15-2019 |
| Jamie Lau Reviewed By (Name of Appropriate University Official) | Jamie Lau Date 11-15-2019 |
| Denny Cochrane Reviewed By (Name of Office of Sustainability Representative) | 1/2/20 Date |

