

# STUDENT ORGANIZATION SUSTAINABILITY INITIATIVE PROPOSAL FORM

## Part I- General Information:

<b>Name of Student Organization</b>	Environmental Innovation at Virginia Tech
<b>Contact/Responsible Person</b>	John Stout
<b>Contact Office Held/Title</b>	President
<b>Contact Email Address</b>	<a href="mailto:johns6@vt.edu">johns6@vt.edu</a>
<b>Contact Telephone Number</b>	240-606-5213

## 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 sustainability initiative and attach supporting documentation.  
 This initiative aims to utilize funding for the replacement of all 264 hallway fluorescent lights in **Payne Hall** for energy-efficient LED lights. The payback period was calculated to be **2.0 years**. Switching current overhead lights for LED lights would not only improve light efficiency, but also reduce greenhouse gas emissions. GHG emissions associated with hallway lights in Payne were calculated to be lowered by about 20,000 pounds if LED lights were implemented.

B. How does this initiative help to achieve the goals of the Virginia Tech Climate Action Commitment Resolution and Sustainability Plan?  
 This initiative will help achieve many of the goals outlined in the Virginia Tech Climate Action Commitment Resolution and Sustainability Plan. Virginia Tech has potential to be a leader in campus sustainability. By replacing hallway lights in Payne, money and energy would be saved, as well as GHG emissions being offset without compromising needs of future generations (*Goal 1*). Replacing current lights for LED lights would reduce greenhouse gas emissions by a calculated 20,013.39 pounds of CO<sub>2</sub> per year and help further progress reducing GHG emissions to 80% below 1990 emission levels by 2050 through actions like improved energy efficiency (*Goal 3, Goal 4*).

C. What is the cost of your proposal? Please describe in adequate detail the basis for your cost estimate.  
 The initial cost of this proposal is \$10,633.92. This cost includes price for the light (manufacturing, shipping), as well as labor. All 264 individual lights would have a collective cost of \$5,683.92, and labor would cost \$4,950 with the assumptions that four fixtures could be installed in an hour and labor costs \$150/hour. (1 fixture = 2 lights)

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.  
 Savings for the university per year would come out to \$5,401.44 per year, which would be reflected on the electricity bill. Additional savings would include CO<sub>2</sub> offset. By converting to lower-wattage LED lights, 20,013.39 pounds (10 tons) of CO<sub>2</sub> would be prevented from emitting to the atmosphere. Those GHG savings would help to improve overall environmental quality.

E. Is this funding request for a One-Time need or an Ongoing need (**please check one**)?

**One-time**

**Ongoing**

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

No

## STUDENT ORGANIZATION SUSTAINABILITY INITIATIVE PROPOSAL FORM (Continued)

### **Part IV- Requestors/Reviewers**

John Stout

11/15/2018

Prepared By (Name of Contact for Student Organization)

Date

Reviewed By (Name of Appropriate University Official)

Date

Reviewed By (Name of Office of Energy and Sustainability Representative)

Date

## STUDENT ORGANIZATION SUSTAINABILITY INITIATIVE FUNDING PROPOSAL CONTACT LIST

In the preparation of your Green RFP form, we encourage student organizations 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, can provide a technical review, and can evaluate the cost & potential savings.

<b>Area of Expertise</b>	<b>Name</b>	<b>Title</b>	<b>Email Address</b>
Energy Management	Ruben Avagyan	Campus Energy Manager	<a href="mailto:rubena@vt.edu">rubena@vt.edu</a>
Facilities: Housing & Residence Life	Todd Pignataro	Associate Director of Facilities	<a href="mailto:ptodd@vt.edu">ptodd@vt.edu</a>
Facilities: Buildings & Grounds	Jim McDaniel	Project Coordinator	<a href="mailto:jmcdani@vt.edu">jmcdani@vt.edu</a>
Water Bottle Refill Stations			
Exterior Lighting	Bob Dellinger	Assoc. Director, Utilities	<a href="mailto:rdelling@vt.edu">rdelling@vt.edu</a>
Student Engagement & Campus Life	Eric Margiotta	Association Director	<a href="mailto:margiotta@vt.edu">margiotta@vt.edu</a>
Dining Services	Anthony Purcell	Assistant Director	<a href="mailto:purcella@vt.edu">purcella@vt.edu</a>
Alternative Transport (Bike, Bus, Walk, etc.)	Jeri Baker	Director, Parking & Transportation	<a href="mailto:jab518@vt.edu">jab518@vt.edu</a>
Landscape Architect	Bob Massengale	Site Planner	<a href="mailto:rmassen@vt.edu">rmassen@vt.edu</a>
Hahn Horticulture Garden	Scott Douglas	Director/Instructor	<a href="mailto:dsd1@vt.edu">dsd1@vt.edu</a>
Recycling	Denny Cochrane	Sustainability Program Manager	<a href="mailto:denniscc@vt.edu">denniscc@vt.edu</a>
Miscellaneous	Karlee Siepierski	Campus Sustainability Planner	<a href="mailto:Skarlee3@vt.edu">Skarlee3@vt.edu</a>