

SUSTAINABILITY INITIATIVES BY STUDENT ORGANIZATIONS FUNDING PROPOSAL

Part I - General Information

Name of Student Organization	Office and Energy and Sustainability
Contact/Responsible Person	Ben Pollins
Contact Office Held/Title	Energy Team Intern
Contact Email Address	Benp2@vt.edu
Contact Telephone Number	703-677-7109

Part II - Project Cost Information

Estimate Cost of this Proposal	\$1,000	See Part III.C
Estimated Savings –	TBD	See Part III.D
Net Cost of this Proposal	\$1,000	

Part III - Supporting Information

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

The purpose of this RFP is to encourage behavioral change with the placement of “Shut the Sash” educational stickers on or near fume hoods. Virginia Tech’s Blacksburg campus has approximately 1,200 fume hood and each consumes between \$2,000 and \$5,000 worth of electricity annually (about as much as 3 average households). For safety reasons, this air comes 100% from outside and must be heated or cooled. Fume Hoods are designed to maintain a constant face velocity. When the sash is lowered the fan speed and volume of air are reduced, which in turn reduces electricity consumption and cost. If Virginia Tech were to approve a “Shut the Sash” infographic for 1,200 fume hoods to encourage a positive behavioral change, faculty and student awareness of electricity use would improve and Virginia Tech could potentially reduce its carbon footprint by millions of pounds, while saving hundreds of thousands of dollars *annually*. Similar “Shut the Sash” campaigns have found great success at other universities, including The University of British Columbia and Harvard, saves over \$200,000 a year from the program.

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

Policy Point # 1 - Virginia Tech will be a leader in Campus Sustainability.

Adding energy-saving graphics to Fume Hoods will solidify Virginia Tech’s reputation as a campus dedicated to sustainable behavior.

Policy Point # 3 - Virginia Tech will establish a target for reduction of campus GHG emissions to 80% below 1990 emissions level by 2050.

Every 1 % reduction of Fume Hood energy usage will reduce our carbon footprint by approx. 500,000 lb./year

Policy Point # 4 - Virginia Tech will work toward these emission reduction targets through improved energy efficiency.

Sustainable Fume Hood usage will reduce electricity consumption by about 1,000,000 kWh per year per 1 % reduction in energy.

Policy Point # 7. Virginia Tech will improve electricity and heating efficiency of campus facilities and their operations, including lighting efficiency.

The more sustainable use of Fume Hoods will lessen strain on air conditioning and heating needs, thus improving the efficiency of campus facilities and their operations.

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

Number of Stickers	~2,000
Estimated Cost of Sticker per Fume Hood	\$0.50
Total Cost of Stickers	\$1,000

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.

Fume Hood calculator: <http://fumehoodcalculator.lbl.gov/>

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.)

None.

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Part IV- Requestors/Reviewers

Ben Pollins, Ann Beverley Prideaux, Katie Ranger, Alex Flevarakis, Smita Sharma

Prepared By (Name of Contact for Student Organization)

Date 11/10/2015

Reviewed By (Name of Appropriate University Official) Ruben Avagyan

Date 11/10/2015

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

Date 11/10/2015