Energy and Sustainability Committee Meeting Minutes February 25, 2013 2:00 – 3:00 p.m. Room 325, Burruss Hall

Present: Fred Selby, Heidi McCoy (for Sherwood Wilson), Savita Sharma (for Dwight Shelton), John Beach (for AVP Facilities Services), Jason Soileau, Denny Cochrane, Jean Smoot (for Frances Keene), Rob Lowe, Georg Reichard, John Randolph, Becky Saylors, Tom Tucker, Paul Winistorfer, James Dale, and Drew Gallagher.

Absent: Althea Aschmann, Bruce Ferguson, Nancy McGehee, Michael Painter, and Catherine Goggins.

Guests: John Chermak, Alyssa Halle, Richard Hirsh, and Maxine Lyons.

Call Meeting to Order and Welcome Guests

Chair Fred Selby called the meeting to order and welcomed the E&S Committee members and guests.

Approval of Agenda

The Committee approved the agenda as proposed.

Approval of Minutes

The Committee approved the minutes from the previous meeting.

Old Business

1. Virginia Tech Climate Action Commitment (VTCAC) Subcommittee Update – Final Review and Vote

Fred Selby shared with the committee that since the January meeting, several members of the VTCAC subcommittee had met offline with VPAS and Office of University Planning leadership and had arrived at mutual agreement around several key wording changes for VTCAC resolutions 6, 7, and 11. He presented a table that listed each of the 14 VTCAC resolutions in their original, intermediate, and final proposed forms (see "E&SC 022513 Attachment 1 – Proposed Changes to the VTCAC Resolution 02-25-13.xlsx"). A motion was raised to vote on the final resolution revisions and the vote resulted in the revisions passing unanimously. The revised VTCAC resolutions will next be presented to the Commission on University Support for a first reading. Fred acknowledged the presence of Maxine Lyons, chair of the Commission on University Support, who was in attendance.

2. 2012-2013 Request for Proposal for Student Organization Sustainability Initiatives (Green RFP) Status Update

Denny Cochrane reported that Travis Hundley, Associate Director for Budget Operations, Office of Budget and Financial Planning, has assembled a group of financial representatives to review the ten Category 1 Green RFPs that the Energy and Sustainability Committee recommended for approval and prioritized Green RFP 2012-13 (see "E&SC 022513 Attachment 2 - Summary Table Final 02 -04 2013.xlsx"). This is the

same process that was used last year. On February 4, 2013, Denny met with the review group and presented each proposal in detail. The review group asked questions and discussed potential funding sources. The process went very well and Denny attributes that to the quality of the Green RFPs we advanced. He anticipates receiving the results in the next few weeks. Denny also passed on Travis' expressed appreciation to the members of the Energy and Sustainability Committee and the Green RFP Subcommittee for the work done on this initiative.

3. VT Sustainability Plan Subcommittee update

In the absence of Steve Mouras, Chair of the VT Sustainability Plan (VTSP) Subcommittee, Denny Cochrane provided a brief status subcommittee update to the full committee. The current VT Sustainability Plan is a working document that was developed in 2008 and accepted by the University Council on April 22, 2009 to accompany the Virginia Tech Climate Action Commitment. The VT Sustainability Plan identifies actions/measures that could completed be in three phases: Immediate Phase (2009-2012), Mid-Term Phase (2013-2025) and Long-Term Phase (2026-2050). The Office of Energy and Sustainability (OES) created a VTCAC&SP "Status Report" spreadsheet that tracks 85 actions/measures in the Immediate Phase. It may be viewed on the OES website: www.facilities.vt.edu/sustainability. To date, nearly 89% of those actions/measures have been completed or in progress.

Denny reported that subsequent to the development of our Sustainability Plan and the creation of the VTCAC&SP Status Report, the Association for the Advancement of Higher Education (AASHE) STARS program was launched. STARS is a management tool that allows colleges and universities to track 135 separate sustainability topics, and it is recognized at the national level as the most comprehensive way to evaluate the effectiveness of a campus sustainability program. Virginia Tech is a charter member of the STARS program, and OES submitted data and information for STARS Version 1.1 on August 2, 2011. The VTSP Subcommittee is assessing the potential use of STARS as the primary basis for a future Sustainability Plan, and supplementing it with specific actions/measures that are unique to Virginia Tech from the VTCAC&SP Status Report and other sources. The supplement could be called "STARS Plus." Following the submission of Virginia Tech's STARS Version 1.2 data and information (see new business item 5 below), OES will take the lead to identify potential "STARS Plus" candidates.

4. RecycleMania 2013 Update

Denny Cochrane provided an update on RecycleMania 2013 which is a friendly competition that promotes recycling awareness and education. The competition is taking place during the period February 3 through March 30, and a total of 523 colleges and universities in the United States and Canada are participating. This is the eight consecutive year for Virginia Tech. Recyclable materials for the competition include cardboard, paper, bottles and cans, and food service organics (composting). Data is submitted by weight and the unit of measure is "pounds." The Office of Energy and Sustainability again has the university lead in this.

Each Wednesday throughout the competition the Office of Energy and Sustainability submits recycling and trash totals for the previous week. The following Friday the RecycleMania 2013 Headquarters posts cumulative results. To access the data for

Virginia Tech and all institutions visit the OES website: www.facilities.vt.edu/sustainability. Under the RecycleMania 2013 banner click on the link "Results for RecycleMania." Commonwealth of Virginia colleges and universities in the have been pre-selected as Virginia Tech's "peer group"; however you can also see how Virginia Tech stacks up against other schools in the Atlantic Coast Conference. There are a number of categories of information. Some of it is cumulative totals while others present data on a per capita basis.

Denny mentioned that The Montgomery Regional Solid Waste Authority and Poplar Manor Enterprises both deserve tremendous credit for providing their data to him on time each and every week. In addition, he thanked Carrie Norman, Communications Manager, Office of the Vice President for Administrative Services for assisting OES in drafting articles for the VT News Daily Email and the VT Student Weekly edition. Be looking for additional articles throughout the competition. So "Get in the Game and Recycle." Finally, committee members were encouraged to spread the word and encourage fellow colleagues to participate.

New Business:

5. Sustainability Tracking, Assessment, and Rating System (STARS) Update

Denny Cochrane presented to the committee an update on STARS ("Sustainability Tracking, Assessment, and Rating System"). The Association for the Advancement of Sustainability in Higher Education (AASHE) developed and launched the STARS Program several years ago and it is recognized at the national level as the most comprehensive sustainability management tool available. STARS is like a sustainability dashboard of information, and it addresses 135 separate topical areas called "credits." Credits are placed into the following three primary categories: Education and Research: Operations; and Planning, Administration, and Engagement. Each category is worth a maximum total of 100 points. Points for the three categories are totaled and divided by 3 to get a summary point total using a 100 point scale. STARS is similar to the US Green Building Council's LEED Program in that the opportunity exists to obtain up to four additional points for innovation credits. The overall point total results in a school receiving one of four STARS ratings: Bronze (minimum of 25 points), Silver (minimum of 45 points), Gold (minimum of 65 points), and Platinum (minimum of 85 points).

Virginia Tech is a charter member of STARS and submitted data and information under STARS version 1.1 in August 2011. Virginia Tech received 61.91 points, which is a very high Silver Rating (the highest to-date of any college or university in the Commonwealth of Virginia). Virginia Tech has re-registered for STARS version 1.2 which has a few minor changes. OES is in the process of gathering and updating data and information with a target date for submission of March 19, 2013. To learn more about STARS go to www.stars.aashe.org/institutions/virginia-tech-va/report/2011-08-02/

6. Open Discussion

No items were raised for open discussion.

Future Meetings

Dates: The remaining scheduled meeting dates for Academic Year 2012-2013 are as follows:

- March 18, 2013 (Moved up one week due to scheduled BOV meeting on March 25)
- April 29, 2013

Times and Location: All meetings will be held from 2:00 p.m. to 3:00 p.m. in 325 Burruss Hall unless noted above.

Adjourn

The meeting was adjourned.

Energy and Sustainability Subcommittee Virginia Tech Climate Action Commitment Resolution Recommended Resolution Changes

Version Date: 2/25/2013

VTCAC Resolution #	Existing VTCAC Resolution	Recommended VTCAC Resolution Changes (Initial)	Recommended VTCAC Resolution Changes (Rev. 1, 02-15-13)	Final Recommended Resolution Changes (Rev. 2, 02-25-13)	
1	Virginia Tech will be a Leader in Campus Sustainability.	Virginia Tech will be a Leader in Campus Sustainability. Sustainability is an integral part of the fabric of the university as it pursues economic stability and affordability, social diversity and inclusion, environmental stewardship, expansion of knowledge, and education of future leaders.	Virginia Tech will be a Leader in Campus Sustainability. Sustainability is an integral part of the fabric of the university as it pursues enhanced economic stability and affordability, social diversity and inclusion, environmental stewardship, expansion of knowledge, and education of future leaders.	Virginia Tech will be a Leader in Campus Sustainability. Sustainability is an integral part of the fabric of the university as it pursues enhanced economic stability and affordability, social diversity and inclusion, environmental stewardship, expansion of knowledge, and education of future leaders.	
2	The university will represent the VTCAC&SP in the Virginia Tech Strategic Plan.	Virginia Tech will represent the VTCAC&SP in the university Strategic Plan.	None	Virginia Tech will represent the VTCAC&SP in the university Strategic Plan.	
3	Virginia Tech will establish a target for reduction of campus GHG emissions to 80% below 1990 emission level by 2050, and interim targets from 2006 emissions of 316,000 tons consistent with the Virginia Energy Plan, the Governor's Commission on Climate Change, the Town of Blacksburg, and the federal administration: for 2012, 295,000 tons (on path to 2025 target); for 2025, 255,000 tons (2000 emission level); and for 2050, 38,000 tons (80% below 1990 emission level).	Virginia Tech will establish a target for reduction of campus GHG emissions to 80% below 1990 emission level of 188,000 tons by 2050, and interim targets from 2006 emissions of 316,000 tons for 2012, 295,000 tons (on path to 2025 target); for 2025, 255,000 tons (2000 emission level); and for 2050, 38,000 tons (80% below 1990 emission level).	None	Virginia Tech will establish a target for reduction of campus GHG emissions to 80% below 1990 emission level of 188,000 tons by 2050, and interim targets from 2006 emissions of 316,000 tons for 2012, 295,000 tons (on path to 2025 target); for 2025, 255,000 tons (2000 emission level); and for 2050, 38,000 tons (80% below 1990 emission level).	
4	Virginia Tech will work toward these emission reduction targets through improved energy efficiency, reduction of energy waste, replacement of high-carbon fuels, and other measures identified in the VTCAC&SP.	Virginia Tech will work toward these emission reduction targets through improved energy efficiency, reduction of energy waste, replacement of high-carbon fuels, and other measures identified in the VTCAC&SP.	None	Virginia Tech will work toward these emission reduction targets through improved energy efficiency, reduction of energy waste, replacement of high-carbon fuels, and other measures identified in the VTCAC&SP.	

VTCAC Resolution #	Existing VTCAC Resolution	Recommended VTCAC Resolution Changes (Initial)	Recommended VTCAC Resolution Changes (Rev. 1, 02-15-13)	Final Recommended Resolution Changes (Rev. 2, 02-25-13)
5	Virginia Tech will establish an Office of Sustainability to a. Coordinate programs for campus sustainability, b. Oversee implementation of the VTCAC&SP, c. Monitor annual electricity and other energy use and GHG emissions, and d. Working with faculty and departments, manage a campus-wide student internship and undergraduate research program using the campus as a sustainability laboratory	Virginia Tech will establish a sustainability office to: a. Coordinate programs for campus sustainability, b. Oversee implementation of the VTCAC&SP, c. Monitor annual electricity and other energy use and GHG emissions, d. Working with faculty and departments, manage a campus-wide student internship and undergraduate research program using the campus as a sustainability laboratory, and e. Coordinate communication regarding campus sustainability initiatives and programs to the university community and external audiences.	Virginia Tech will establish maintain a sustainability office to: a. Coordinate programs for campus sustainability, b. Oversee implementation of the VTCAC&SP, c. Monitor annual electricity and other energy use and GHG emissions, d. Working with faculty and departments, manage a campus-wide student internship and undergraduate research program using the campus as a sustainability laboratory, and e. Coordinate communication regarding campus sustainability initiatives and programs to the university community and external audiences.	Virginia Tech will maintain a sustainability office to: a. Coordinate programs for campus sustainability, b. Oversee implementation of the VTCAC&SP, c. Monitor annual electricity and other energy use and GHG emissions, d. Working with faculty and departments, manage a campus-wide student internship and undergraduate research program using the campus as a sustainability laboratory, and e. Coordinate communication regarding campus sustainability initiatives and programs to the university community and external audiences.
6	Virginia Tech will pursue LEED Silver certification or better and exceed ASHRAE 90.1 2004 energy performance by 35% (ASHRAE 90.1 2007 by 30%) for all new buildings and major renovations. Capital budgets should account for future energy price, cost of building operation, return on investment, and environmental benefits of achieving this level of performance.	Virginia Tech will improve the sustainability of its built environment by: a. Achieving LEED Silver certification or better for all eligible and applicable new buildings and major renovations. b. Pursuing LEED for Existing Buildings certification for its existing buildings.	Virginia Tech will improve the sustainability of its built environment by achieving LEED Silver certification or better for all eligible and applicable new buildings and major renovations. b. Pursuing LEED for Existing Buildings certification for its existing buildings.	Virginia Tech will improve the sustainability of its built environment by: a. Achieving LEED Silver certification or better for all eligible and applicable new buildings and major renovations. b. Evaluating the feasibility of LEED for Existing Buildings certification for its existing buildings.
7	Virginia Tech will improve electricity and heating efficiency of campus facilities and their operations, including the heating and cooling infrastructure and operation, lighting efficiency, controls and operation, and equipment efficiency and controls.	Virginia Tech will improve electricity and heating efficiency of campus facilities and their operations by: a. Exceeding the most current version of ASHRAE 90.1 energy performance by 20% for all new buildings and major renovations. Capital budgets should account for future energy price, life cycle cost of building operation, and environmental benefits of achieving this level of performance. b. Improving the heating and cooling infrastructure and operation, lighting efficiency, equipment efficiency, and metering and controls of its existing buildings.	Virginia Tech will improve electricity and heating efficiency of campus facilities and their operations by: a. Exceeding the most current version of ASHRAE 90.1 energy performance by 20% 10% for all new buildings and major renovations. Capital budgets should account for future energy price, life cycle cost of building operation, and environmental benefits of achieving this level of performance. b. Improving the heating and cooling infrastructure and operation, lighting efficiency, equipment efficiency, and metering and controls of its existing buildings.	Virginia Tech will improve electricity and heating efficiency of campus facilities and their operations by: a. Exceeding the most current version of ASHRAE 90.1 energy performance by pursuing 20% and achieving at least 10% for all new buildings and major renovations. Capital budgets should account for future energy price, life cycle cost of building operation, and environmental benefits of achieving this level of performance. b. Improving the heating and cooling infrastructure and operation, lighting efficiency, equipment efficiency, and metering and controls of its existing buildings.

VTCAC Resolution #	Existing VTCAC Resolution	Recommended VTCAC Resolution Changes (Initial)	Recommended VTCAC Resolution Changes (Rev. 1, 02-15-13)	Final Recommended Resolution Changes (Rev. 2, 02-25-13)	
8	The university will adopt at least 4 reduction measures in the Waste Minimization component of the national RecycleMania competition. Virginia Tech Recycling will adopt a goal of 35% recycle rate by 2012 and 50% by 2025.	Virginia Tech will minimize waste and achieve a 50% recycle rate by 2020.	None	Virginia Tech will minimize waste and achieve a 50% recycle rate by 2020.	
9	Virginia Tech will require purchase of Energy Star rated equipment, maximum practicable recycled-content paper, and other low life-cycle cost products, with exceptions for special uses.	Virginia Tech will: a. Require purchase or lease of Energy Star rated equipment and maximum practicable recycled content paper, in accordance with University Policy 5505. b. Consider a product's life cycle cost and impact when making purchasing decisions.	Virginia Tech will: a. Require purchase or lease of Energy Star rated equipment and maximum practicable recycled content paper, in accordance with University Policy 5505, with exceptions for special uses. b. Consider a product's life cycle cost and impact when making purchasing decisions	Virginia Tech will: a. Require purchase or lease of Energy Star rated equipment and maximum practicable recycled content paper, in accordance with University Policy 5505, with exceptions for special uses. b. Consider a product's life cycle cost and impact when making purchasing decisions	
10	Virginia Tech will engage students, faculty and staff through education and involvement to reduce consumption of energy, water, and materials in academic and research buildings, dining and residence halls, and other facilities.	Virginia Tech will engage students, faculty, and staff through education and involvement to develop and implement innovative strategies for efficient and sustainable use of energy, water, and materials in all university-owned facilities.	None	Virginia Tech will engage students, faculty, and staff through education and involvement to develop and implement innovative strategies for efficient and sustainable use of energy, water, and materials in all university-owned facilities.	
11	Virginia Tech will improve transportation energy efficiency on campus through parking, fleet, and alternative transportation policies. Alternative transportation use will increase from the current level of 45%, to a goal of 52% in 2015, and 60% in 2020.	Virginia Tech will improve transportation energy efficiency on campus through parking, fleet, and alternative transportation policies. The university will continue to implement programs that encourage the use of alternative transportation method and increase participation in these programs.	Virginia Tech will improve transportation energy efficiency on campus through parking, fleet, and alternative transportation policies and practices. The university will continue to implement programs that encourage the use of alternative transportation method and increase participation in these programs will continue to implement programs and services that promote eco-responsible fleet management.	Virginia Tech will improve transportation energy efficiency on campus through parking, fleet, and alternative transportation policies and practices. The university will continue to implement programs that encourage and increase the use of alternative transportation methods. The university and will also continue to implement programs and services that promote eco-responsible fleet management.	
12	The university will create and support a virtual Virginia Tech School of Sustainability or similar mechanism to coordinate, develop, and communicate related instructional, research, and outreach academic programs.	Virginia Tech will continue to develop and implement innovative sustainability-related academic programs in instruction, research, and outreach, and will coordinate and communicate these programs to the university community and external audiences.	None	Virginia Tech will continue to develop and implement innovative sustainability-related academic programs in instruction, research, and outreach, and will coordinate and communicate these programs to the university community and external audiences.	
13	The university will monitor energy use and GHG emissions as well as changing internal and external conditions, prepare an annual 'report card' showing progress towards targets, and periodically re-evaluate targets, making adjustments to targets as appropriate based on changing internal and external conditions and evolving technologies.	Virginia Tech will monitor energy use and GHG emissions as well as changing internal and external conditions, prepare an annual 'report card' showing progress towards targets, and periodically re-evaluate targets, making adjustments to targets as appropriate based on changing internal and external conditions and evolving technologies.	None	Virginia Tech will monitor energy use and GHG emissions as well as changing internal and external conditions, prepare an annual 'report card' showing progress towards targets, and periodically re-evaluate targets, making adjustments to targets as appropriate based on changing internal and external conditions and evolving technologies.	

VTCAC Resolution #	Existing VTCAC Resolution	Recommended VTCAC Resolution Changes (Initial)	Recommended VTCAC Resolution Changes (Rev. 1, 02-15-13)	Final Recommended Resolution Changes (Rev. 2, 02-25-13)
14	With regard to all the items in this resolution, major personnel and investment decisions, including capital projects, associated with implementing the VTCAC&SP will be based on a joint review of costs and benefits by university financial and facilities staff and be subject to availability of funds. Virginia Tech will provide funding to support sustainability programs through a variety of sources, which might include savings from reduced electricity and energy fuels, E&G funds, loans, a Green Development Fund from private sources, and a student Green Fee.	Virginia Tech will work to provide funding to support sustainability programs. With regard to all the items in this resolution, major personnel and investment decisions, including capital projects, associated with implementing the VTCAC&SP will be based on a joint review of costs and benefits by university financial and facilities staff and be subject to availability of funds.	None	Virginia Tech will work to provide funding to support sustainability programs. With regard to all the items in this resolution, major personnel and investment decisions, including capital projects, associated with implementing the VTCAC&SP will be based on a joint review of costs and benefits by university financial and facilities staff and be subject to availability of funds.
NEW n/a	n/a	NEW: Virginia Tech Sustainability Definition, Vision, & Mission. Sustainability Definition: Sustainability is the simultaneous pursuit of environmental quality, economic prosperity, and social justice and equity, through action, education, and engagement to address current needs without compromising the capacity and needs of future generations. Sustainability Vision: Virginia Tech serves as a model community for a sustainable society. Sustainability is an integral part of the fabric of the university as it pursues economic stability and affordability, social diversity and inclusion, environmental stewardship, expansion of knowledge, and education of future leaders. Sustainability Mission: The pursuit of sustainability is achieved through Virginia Tech's administration; physical environment and operations; student life and experience; campus culture and behavior; and academic learning, discovery, and engagement.	Sustainability Vision: Virginia Tech serves as a model community for a sustainable society. Sustainability is an integral part of the fabric of the university as it pursues economic stability and affordability, social diversity and inclusion, environmental stewardship, expansion of knowledge, and education of future leaders.	NEW: Virginia Tech Sustainability Definition, Vision, & Mission. Sustainability Definition: Sustainability is the simultaneous pursuit of environmental quality, economic prosperity, and social justice and equity, through action, education, and engagement to address current needs without compromising the capacity and needs of future generations. Sustainability Vision: Virginia Tech serves as a model community for a sustainable society. Sustainability is an integral part of the fabric of the university as it pursues economic stability and affordability, diversity and inclusion, environmental stewardship, expansion of knowledge, and education of future leaders. Sustainability Mission: The pursuit of sustainability is achieved through Virginia Tech's administration; physical environment and operations; student life and experience; campus culture and behavior; and academic learning, discovery, and engagement.
NEW n/a	n/a	NEW: VTCAC Acronyms ASHRAE – American Society of Heating, Refrigerating and Air Conditioning Engineers GHG – Greenhouse Gas LEED – Leadership in Energy and Environmental Design VTCAC&SP - Virginia Tech Climate Action Commitment & Sustainability Plan	None	NEW: VTCAC Acronyms ASHRAE – American Society of Heating, Refrigerating and Air Conditioning Engineers GHG – Greenhouse Gas LEED – Leadership in Energy and Environmental Design VTCAC&SP - Virginia Tech Climate Action Commitment & Sustainability Plan

GREEN RFP 2012-13 SUMMARY

February 4, 2013

CATEGORY 1: Proposals Recommended for Approval and Funding Consideration (listed in priority order)

<u>No.</u>	Title and Description	Student Organization	One-Time Cost	Base Cost	<u>Impact</u>
1.	Small Outdoor Metal Recycling Containers. Requests 25 commingled containers for bottles and cans recycling for placement next to existing similar sized trash containers located in high visible locations around the Drillfield, Alumni Mall, Torgersen Hall and Newman Library.	Environmental Coalition	\$13,225	\$10,000	Contract Services to be provided by Bob Refuse Services. Contract rate to service the additional 25 containers twice a week is estimated to be \$200 per week. Base cost request reflects 52 weeks of service per year. Annual Cost Savings: \$570 (\$19 savings per ton X 30 tons).
2.	Water Bottle Filling Stations for the War Memorial Gymnasium. Requests the installation of a Bi-Level Cooler Unit with a Water Bottle Filling Station to replace several existing fixtures at four locations, and a Water Bottle Filling Station Retro Kit to be added to an existing Cooler Unit. Endorsed by University ADA Services and Rec Sports.	Environmental Coalition	\$15,115	\$0	Several Cooler Units with Water Bottle Filling Station and Retro Kits were funded last year for other locations and the response from students is overwhelming positive. The Bi-Level Cooler Unit with a Bottle Filling Station costs \$1,202, and the Retro Kit costs \$349. Facilities Services estimates total installation costs is \$10,000. Annual Cost Savings: To be determined.
3.	Hillcrest Hall High-Efficiency Lighting Upgrade. Request funds for re-ballasting and revamping 115 existing lighting fixtures in public areas to include hallways, study areas, and lounges.	Environmental Coalition	\$27,000	\$0	This proposal will reduce energy consumption and improve energy efficiency. One-time cost estimate is based on analyzing data from the PEPCO Energy Services, Inc. (ESCO). Annual Cost Savings: \$4,000 per year (6.75 ROI).
4.	Waste Stations. Requests funds to purchase four Indoor and three outdoor 32 Gallon Waste Sorting Stations for collecting post-consumer compostable food waste at three dining facilities. Specific locations include two stations at the Squires Student Center, two stations at the Graduate Life Center, and three stations placed outside and under	Environmental Coalition	\$12,000	\$0	Four identical indoor Waste Stations were funded last year. Dining Services personnel will service the stations. Proposed locations are at or in proximity to dining facilities that are currently composting. Annual Cost Savings: \$1,153 per year (10.4 ROI).

the overhang in front of the Dietrick Dining Hall.

No.	<u>Title and Description</u>	Student Organization	One-Time Cost	Base Cost	<u>Impact</u>
5.	Additions to Sustainable Farm. Request to purchase materials to maintain the Sustainable Food Corps (SFC) Farm located adjacent to the Smithfield Plantation. All food produced at the farm is donated to local organizations.	Sustainable Food Corps	\$2,500	\$0	The Smithfield Farm is a very popular educational and outreach program for our students. This request seeks funding for an entrance gate, additions and maintenance for the storage shed, upgrades to the existing irrigation system, a washing station, tools and garden supplies. Annual Cost Savings: None
6.	Bike Racks. Request to purchase and install 20-25 bike racks. The Office of University Planning (OUP) is currently developing a Bike Parking Master Plan which is estimated for completion in May 2013. If the proposal is approved, OUP will select specific bike rack locations consistent with the recommendations set forth in the Plan.	SGA, Director of Transportation	\$25,000	\$0	Additional bike racks are requested to meet a critical shortage in high-density use areas such as near academic buildings and residence halls. Annual Cost Savings: It costs between \$60 and \$100 to maintain a single parking spot. One 5-loop bike rack can accommodate 10 bikes. 20 bike racks can accommodate 200 bikes. 200 bikes could reduce the maintenance costs between \$12,000 and \$20,000.
7.	Bicycle Fix-It Stations. Requests funds to purchase, and install three Bike Fix-It Stations at the following locations: one at the Burchard Hall Quad, one near the Dietrick Dining Hall, and one at the Library Plaza.	SGA, Director of Transportation	\$4,200	\$250	The Dero Brand Bicycle Fix-It Stations are very popular and in use at many institutions. Experience shows the need to provide base funds to purchase replacement tools and accessories that may be taken or damaged. Annual Cost Savings: To be determined.
8.	Graduate Life Center Initiatives. Request funds to purchase and install one Water Bottle Filling Station Retro Kit to an existing Cooler Unit, six steel recycling receptacles for hallway placement, and four plastic recycling containers for interior rooms.	Graduate Student Association (GSA)	\$3,250	\$0	The Graduate Life Center at Donaldson Brown has been identified to serve as a model facility for sustainability enhancements. Annual Cost Savings: To be determined.
9.	Low Flow Shower Heads for Residence Halls. Request funds to replace 266 existing shower heads in 21 Residence Halls that currently have 3.5 or 3.0 gallons per minute (GPM) fixtures with low-flow shower head 2.5 GPM fixtures.	SGA Sustainability Subcommittee	\$5,320	\$0	The proposal requests \$5,320 to purchase all 266 low-flow shower heads. Facilities Management, Housing and Residence Life, will provide the \$6,650 labor cost which Residential Life. The total proposal cost is \$11,970. Annual Cost Savings: \$45,000 (Immediate). Estimated annual water savings is 23,000,000 gallons (5%).

No.	Title and Description	Student Organization	One-Time Cost	Base Cost	<u>Impact</u>
10.	Compostable Utensils for Dining Services. Request funds to purchase compostable utensils to replace existing plastic utensils at our newest dining facility Turner Place. This would serve as a demonstration project to assist Dining Services evaluate if this strategy is viable for their other facilities.	Environmental Coalition	\$1,000	\$0	The proposal requests funds to purchase 15,000 compostable utensils to replace a similar number of plastic utensils, and compostable educational signage. Annual Cost Savings: Minimal. Compostable utensils weigh slightly more than plastic utensils, but the cost to dispose of compostable utensils is \$10 per ton less.
11.	Recycling Bins for Batteries & Ink Cartridges. Request funds to purchase 56 small recycling bins to be placed in a select number of residence halls. Bins to be introduced in pairs-one for Alkaline Batteries and one for Ink-Cartridges.	Environmental Coalition	\$700	\$0	Environmental, Health and Safety (EHS) will provide the labor and processing costs as part of their normal operating procedures. No additional costs are anticipated by EHS. Annual Cost Savings: None
		Category 1 Total Cost	\$109,310	\$10,250	11 Proposals