Energy and Sustainability Committee Meeting Minutes
January 28, 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), Steve Mouras (for Jason Soileau), Denny Cochrane, Jean Smoot (for Frances Keene), Bruce Ferguson, Rob Lowe, Georg Reichard, John Randolph, Nancy McGehee, Tom Tucker, Paul Winistorfer, James Dale, and Catherine Goggins.

Absent: Althea Aschmann, Becky Saylors, Michael Scott Painter, and Drew Gallagher.

Guests: John Chermak, Alyssa Halle, Anthony Purcell, and Richard Hirsh.

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

   Denny Cochrane provided a brief summary and status of the program. Last fall the Office of Energy and Sustainability received a total of 20 proposals from nine student organizations. The Energy and Sustainability Committee established a Green RFP Subcommittee to facilitate the review process. Members of the subcommittee included Denny as the Chair, Nancy McGhee, Rob Lowe, and James Dale. Following their review, proposals were placed in one of three categories:

   Category 1: Proposal is recommended for approval and funding. (11 proposals)

   Category 2: Proposal has merit, but not recommend for approval and funding at this time. (5 proposals)

   Category 3: Proposal is not recommended for approval and funding approval. (4 proposals)

   Denny Cochrane next met with and presented the results in a Green RFP 2012-2013 Summary Table in priority order to Jason Soileau, Assistant Vice President, Office of University Planning. Jason recommended only advancing the Category 1 proposals, was supportive on those proposals, and offered very constructive comments to streamline and standardize information in the Summary Table. The revised version of the Green RFP 2012-2103 Summary Table is shown in the attachment (see "E&SC 012813 Attachment 1

– Green RFP 2012-13 Summary Table Final 12-21-2012.xlsx"). Jason then presented the information to Dr. Sherwood Wilson, Vice President for Administrative Services, and received his approval to proceed. The Energy and Sustainability Committee approved the Category 1 proposals via electronic vote on December 19, 2012. Denny Cochrane presented all documentation to Travis Hundley, Associate Director for Budget Operations, Office of Budget and Financial Planning, on December 21.

Travis has assembled a Review Group of budget colleagues to finalize recommended proposal approvals and to identify funding sources. Denny will brief the Review Group on February 4 at 10:30am in Room 110, Burruss Hall and expects final results to be forthcoming in the mid to late February.

2. Virginia Tech Climate Action Commitment and Sustainability Plan (VTCAC&SP) Subcommittee Update

Although an initial review of the proposed changes to the Virginia Tech Climate Action Commitment (VTCAC) Resolution occurred at the November 26, 2012 Energy and Sustainability Committee meeting, due to the large number of committee members not present at that meeting, Alyssa Halle, Graduate Assistant with the Office of Energy and Sustainability, again presented the final review of the proposed changes (see "E&SC 012813 Attachment 2 – Final Presentation of VTCAC Recommendations (11 26 12).pptx"). In response, Heidi McCoy asked if a funding source had been identified to address the new LEED Certification for Existing Buildings provision to resolution #6; Chair Fred Selby responded that a funding source had not yet been identified.

The proposed VTCAC Resolution changes are currently under review by VPAS and Legal Counsel. Once feedback is received from VPAS and Legal Counsel, the finalized VTCAC Resolution changes will be sent to the Energy and Sustainability Committee for an electronic vote. Pending approval by the Energy and Sustainability Committee, the VTCAC Resolution changes will then be required to be reviewed and approved through the university governance system.

3. VT Sustainability Plan Subcommittee update

Due to Steve Mouras unexpectedly having to leave the meeting, Chair Fred Selby briefly presented his status update of the new subcommittee to update and enhance the original March 4, 2009 Sustainability Plan (see "E&SC 012813 Attachment 3 – SP Subcommittee Update.pptx".) Current focus of the subcommittee is aligning the existing Sustainability Plan actions within the STARS credits framework.

New Business

4. RecycleMania 2013 Update

For the eighth consecutive year Virginia Tech will participate in the nationally recognized EPA sponsored RecycleMania program (see "E&SC 012813 Attachment 4 – RecycleMania 2013 Banner.pdf".) RecycleMania 2013 is a friendly competition among colleges and universities across North America to promote recycling awareness and education. Held each spring during an eight week period, schools compete to see who can

recycle the most material and create the least amount of trash. Recyclable materials for the competition include: paper, cardboard, plastic bottles & aluminum cans, and food service organics, i.e. composting. Materials are measure by weight in pounds. Total amounts for each material are determined, as well as material on a per capital basis.

RecycleMania 2013 will be officially held during the period February 3 through March 30. The Montgomery Regional Solid Waste Authority in Christiansburg will provide data for trash and all recycling materials except food service organics. Poplar Manor Enterprises in Riner will provide the compositing figures. To assist the data collection process there will be a two-week Trial Period from January 20 through February 2.

The Office of Energy and Sustainability has the overall responsibility to promote and coordinate RecycleMania 2013 activities. The competition is open to everyone on campus. All university students and employees are encouraged to participate. RecycleMania 2013 provides an ideal opportunity to conduct your spring housecleaning and to recycle those materials no longer needed - especially paper products.

In 2012 Virginia Tech recycled 578,060 pounds of materials and this represented a 29% increase from 2011 (447,320 pounds). Materials included:

- 208,420 pounds of paper,
- 127,920 pounds of cardboard,
- 45, 420 pounds of plastic bottles & aluminum cans
- 196,300 pounds of food service organics (composting)

Thanks in large part to Library Services' journal recycling program, Virginia Tech's 2012 paper recycling total increased over 70%. Food service organics increased by 23%. Last year Virginia Tech placed second in the competition in the Commonwealth of Virginia behind UVA.

For Calendar Year 2011 Virginia Tech achieved an overall recycling rate of 40.14%. Data collection for the CY 2012 report is underway, and preliminary indications project the university's overall recycling rate to be even higher. This upward trend in recycling rates has been consistent over the past decade and RecycleMania 2013 helps to promote that awareness and encourage more participation. So "Get in the Game and Recycle."

5. **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:

- February 25, 2013
- 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.

GREEN RFP 2012-13 SUMMARY
December 21 ,2012

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

No.	Title and Description	Student Organization	One-Time Cost	Base Cost	Impact
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	$25,000	1 FTE per Facilities Operations. Estimated 2,500 man hours/yr to service 25 additional containers. **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 the overhang in front of the Dietrick Dining Hall.	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).

No.	Title and Description	Student Organization	One-Time Cost	Base Cost	Impact
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	Impact
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**	**$25,250**	**11 Proposals**

Virginia Tech Climate Action Commitment Resolution 2012 Review & Recommendations

Energy & Sustainability Subcommittee Presentation
to the Energy & Sustainability Committee
November 26, 2012

VirginiaTech
Invent the Future

VTCAC&SP Overview

- The **Virginia Tech Climate Action Commitment Resolution** (VTCAC) is a 14-point university policy
- The **Sustainability Plan** (SP) is a working document that provides actions and measures to direct the university toward achieving the goals and targets in the VTCAC Resolution
- The Sustainability Plan is divided into three implementation phases:
  - "Immediate Phase" 2009-2012
  - "Midterm Phase" 2013-2025
  - "Long Term Phase" 2026-2050

VTCAC&SP Overview

- The university is now at the end of the “Immediate Phase” and entering the “Midterm Phase”
- The Energy & Sustainability Committee established a subcommittee to:
  - Review the language in the VTCAC Resolution and recommend changes, if needed
  - Review the status of the VTCAC&SP and recommend “next steps” for updating the Sustainability Plan

VTCAC Resolution Review & Approval Process

- Changes to the VTCAC Resolution must be reviewed and approved by the following:
  - **Energy & Sustainability Committee:** Initial Review
    - November 26, 2012
  - **VPAS & Legal Counsel**
    - December 2012 – January 2013
  - **Energy & Sustainability Committee:** Final Review
    - January 28, 2013

VTCAC Resolution Review & Approval Process

- Pending VPAS & Legal Counsel review, the changes to the VTCAC Resolution may need to be reviewed and approved by the following:
  - **Commission on University Support & other related commissions**
    - February – March 2013
      - First and second readings
  - **University Council**
    - April 2013
      - First and second readings
  - **Virginia Tech Board of Visitors**
    - June 2-3, 2013

VTCAC Resolution #1

- **Existing Language:**
  - *Virginia Tech will be a Leader in Campus Sustainability.*
- **Recommended Changes:**
  - *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.*
- **Rationale for Recommended Changes:**
  - Addition of the new Virginia Tech sustainability vision to clarify what it means to "be a leader in campus sustainability."

VTCAC Resolution #2

- **Existing Language:**
  - *The university will represent the VTCAC&SP in the Virginia Tech Strategic Plan.*
- **Recommended Changes:**
  - *Virginia Tech will represent the VTCAC&SP in the university Strategic Plan.*
- **Rationale for Recommended Changes:**
  - Minor change in wording from "the university" to "Virginia Tech" for consistency with all Resolutions.

VTCAC Resolution #3

- **Existing Language:**
  - *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).*
- **Recommended Changes:**
  - *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).*
- **Rationale for Recommended Changes:**
  - Minor language changes to add the 1990 emission level and to remove references to programs that no longer exist.

* GHG – Greenhouse gas

VTCAC Resolution #4

- **Existing Language:**
  - *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.*
- **Recommended Changes:**
  - None

VTCAC Resolution #5

- **Existing Language:**
  - *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*

VTCAC Resolution #5 Cont'd.

- **Recommended Language Changes:**
  - *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.*

VTCAC Resolution #5 Cont'd.

- **Rationale for Recommended Changes:**
  - Minor change of the wording "Office of Sustainability" to "sustainability office."
    - The goal is to keep the Resolution language general in nature to allow for unforeseen changes in the future. For example, the name of the original "Office of Sustainability" has already been changed to the "Office of Energy and Sustainability."
  - Addition of 5.e to include communicating sustainability initiatives to the university community and external audiences.
    - This is already a major effort of the Office of Energy and Sustainability through programs such as AASHE STARS, The Princeton Review, and internal sources such as VT News articles and outreach. This should be a stated objective to reflect existing practices and further emphasize the importance of communicating sustainability initiatives.

VTCAC Resolution #6

- **Existing Language:**
  - *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.*
- **Recommended Language Changes:**
  - *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.*

* LEED – Leadership in Energy and Environmental Design
* ASHRAE – American Society of Heating, Refrigerating, and Air Conditioning Engineers

VTCAC Resolution #6 Cont'd.

- **Rationale for Recommended Changes:**
  - Relocated information regarding ASHRAE* to Resolution #7 with the intent of strengthening LEED* focus in #6 and campus energy focus in #7.
  - Although the university has met its objectives on the LEED portion of Resolution #6, it has not been exceeding ASHRAE 90.1 by the 30-35% range indicated (LEED silver certification has been readily achieved without pursuing LEED's energy efficiency measures).
  - Separation of Resolution into 6.a. to target new construction and 6.b. to target existing buildings.
  - Addition of language addressing "LEED for Existing Buildings" to address LEED requirement to re-certify LEED buildings originally constructed under "LEED for New Construction" as "LEED for Existing Buildings" after five years in operation. Adding a "LEED for Existing Buildings" focus will ensure continued sustainability of recently-constructed and pre-LEED buildings.

* LEED – Leadership in Energy and Environmental Design
* ASHRAE – American Society of Heating, Refrigerating, and Air Conditioning Engineers

VTCAC Resolution #7

- **Existing Language:**
  - *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.*
- **Recommended Language Changes:**
  - *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.*

* ASHRAE – American Society of Heating, Refrigerating, and Air Conditioning Engineers

VTCAC Resolution #7 Cont'd.

- **Rationale for Recommended Changes:**
  - Information regarding ASHRAE* from Resolution #6 was relocated to Resolution #7.
  - "ASHRAE 90.1 2004" reference was changed to "the most current version of ASHRAE 90.1" due to periodic revising of the standard.
  - Past LEED buildings have used the best "state of the shelf technology," which exceeds ASHRAE 90.1 in the range of 10-15%. To reach 30-35%, the university would have to switch to "state of the art technology" which will require university cultural and financial changes.
  - A reduced percentage of exceeding ASHRAE 90.1 by 20% is felt to be aggressive, yet attainable.

* ASHRAE – American Society of Heating, Refrigerating, and Air Conditioning Engineers

VTCAC Resolution #8

- **Existing Language:**
  - *~~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.*
- **Recommended Language Changes:**
  - *Virginia Tech will minimize waste and achieve a 50% recycle rate by 2020.*

VTCAC Resolution #8 Cont'd.

- **Rationale for Recommended Changes:**
  - Virginia Tech has consistently exceeded both the four waste reduction measures for RecycleMania, as well as the 35% recycle rate goal, since 2009.
  - The information regarding RecycleMania was moved from the Resolution to an action/measure in the Sustainability Plan because it is a specific program that may change over time.
  - Using the Commonwealth of Virginia Department of Environmental Quality Calendar Year Locality Recycling Rate formula, the university achieved recycling rates of 36.5%, 37.5%, and 40.1% for calendar years 2009, 2010, and 2011 respectively.
  - The university is well on track to achieve the proposed rate of 50% by 2020.

VTCAC Resolution #9

- **Existing Language:**
  - *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.*
- **Recommended Language Changes:**
  - *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.*

* University Policy 5505 – Campus Energy, Water, and Waste Reduction Policy

VTCAC Resolution #9 Cont'd.

- **Rationale for Recommended Changes:**
  - The resolution was separated out into two components to highlight that 9.a. is mandated through existing Policy 5505 and that 9.b. is recommended.

VTCAC Resolution #10

- **Existing Language:**
  - *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.*
- **Recommended Language Changes:**
  - *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.*
- **Rationale for Recommended Changes:**
  - Minor grammar changes and clarifications to the intent of the existing Resolution.

VTCAC Resolution #11

- **Existing Language:**
  - *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.~~*
- **Recommended Language Changes:**
  - *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.*
- **Rationale for Recommended Changes:**
  - Change in wording to keep the Resolution language more general in nature to allow for possible changes in methodology.

VTCAC Resolution #12

- **Existing Language:**
  - *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.*
- **Recommended Language Changes:**
  - *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.*
- **Rationale for Recommended Changes:**
  - Changes made to emphasize the ongoing efforts of the academic community and the importance of communicating sustainability-related initiatives.
  - The "virtual Virginia Tech School of Sustainability" wording was removed since this is no longer being pursued.

VTCAC Resolution #13

- **Existing Language:**
  - *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.*
- **Recommended Language Changes:**
  - *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.*
- **Rationale for Recommended Changes:**
  - Minor change in wording from "the university" to "Virginia Tech" for consistency with all Resolutions.

VTCAC Resolution #14

- **Existing Language:**
  - *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.~~*
- **Recommended Language Changes:**
  - *Virginia Tech will 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.*

VTCAC Resolution #14 Cont'd.

- **Rationale for Recommended Changes:**
  - Resolution wording was reordered for consistency with all Resolutions.
  - Specific names of potential funding sources were removed to keep the Resolution language more general in nature to allow for unforeseen changes and/or additional funding mechanisms in the future.

Virginia Tech Definition of Sustainability

- **Sustainability Definition:**
  - Sustainability is the simultaneous pursuit of social justice and equity, economic prosperity, and environmental quality 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.

Recommendations & Next Steps

- **Recommendations:**
  - Reorganize the numbering of the Resolutions to group related Resolutions.
  - Consider expanding the existing categories in the VTCAC&SP to be consistent with the new sustainability definition, vision, and mission.
  - Create six or more new subcommittees to review the actions and measures of each category in the existing VTCAC&SP:
    - 1) Administrative Structure & Governance; 2) Facilities Infrastructure; 3) Facilities Operations; 4) Transportation; 5) Behavior and Campus Life; 6) Academic Programs; 7) Others, as needed
    - Each new subcommittee will:
      1. Review and revise the actions and measures in the existing "Immediate Phase" and "Midterm Phase" of the Sustainability Plan.
      2. Recommend a new "Immediate Phase" from 2013-2016 to include actions and measures to direct the university toward achieving the goals and targets in the VTCAC Resolution.

Recommendations & Next Steps

Existing Order	Proposed Order by Topic
1. Leader in Campus Sustainability	**1. Leader in Campus Sustainability** (existing #1)
2. VTCAC&SP Representation in Strategic Plan	**2. VTCAC&SP Representation in Strategic Plan** (existing #2)
3. GHG Emission Targets	**3. Sustainability Office** (revised version of #5)
4. Efficiency/Reductions to Achieve GHG Targets	**4. GHG Emission Targets** (revised version of #3)
5. Office of Sustainability	**5. Efficiency/Reductions to Achieve GHG Targets** (revised version of #4)
6. LEED Certification, ASHRAE, & Energy Efficiency	**6. Monitoring GHG Emissions** (existing #13)
7. Improved Efficiencies	**7. LEED Certification** (revised version of #6)
8. Recycling & Waste Minimization	**8. ASHRAE & Energy Efficiency** (revised versions of #6 & 7)
9. Purchasing	**9. Recycling & Waste Minimization** (revised version of #8)
10. Student, Faculty, & Staff Engagement	**10. Purchasing** (revised version of #9)
11. Transportation & Alternative Transportation	**11. Transportation & Alternative Transportation** (revised version of #11)
12. Academic Programs	**12. Student, Faculty, & Staff Engagement** (revised version of #10)
13. Monitoring GHG Emissions	**13. Academic Programs** (revised version of #12)
14. Investment	**14. Investment** (revised version of #14)

Questions?

Prepared by the

Energy & Sustainability Subcommittee:

John Beach
Denny Cochrane
Angie De Soto
Deborah Freed
Bruce Ferguson
Lauren Grimes
Alyssa Halle
Bill Hess
Leigh LaClair
Rob Lowe
Byron Nichols
Anthony Purcell
John Randolph
Georg Reichard
Fred Selby
Mary Seyler
Savita Sharma
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Sustainability Plan Sub-Committee Update (1/28/13)

- Purpose: Update & enhance the Sustainability Plan.
- Proposed approach: Update the plan by using a "supplement" aligned with STARS plus VT unique tasks.
- Steps:
    1. Update the current Sustainability Plan (Status Report).
    2. Align existing plan with STARS.
    3. Identify VT unique tasks (STARS "+")
    4. Identify "contact" person for those VT unique tasks.
    5. Draft text for Sustainability Plan Supplement focusing on updating baseline data.

Get In The Game: Recycle

Feb 3 - Mar 30, 2013

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