Energy & Sustainability Committee Meeting Minutes 4/23/18 2:00 - 3:00pm | Burruss Hall 130

Attendees: Kayla Smith for Sherwood Wilson, Debbie Greer for Dwight Shelton, Jon Clark Teglas for Chris Kiwus, Jack Washington for Jason Soileau, Gwyneth Manser for Frances Keene, Denny Cochrane, Scott Kerklo, Virgil Centeno, Sean McGinnis, Luke Juran, Judy Taylor, Alan Grant, Siddharth Behla, Jeremy Smith

Guests: Ruben Avagyan, Linda Correll, Barbara Wise, Angie De Soto, Karlee Siepierski

Motion to approve March minutes: Jeremy Smith move, Virgil Centeno second **Motion to approve April agenda:** Judy Taylor approve, Scott Kerklo second

Old Business

Governor's Environmental Excellence Awards

- GEEA awards are given each year at the Environment Virginia Symposium
- Angie DeSoto & CNRE were awarded a Bronze GEEA for her Sustainability Boot Camp Program
- Gwyneth Manser & VT Dining Services were given an Honorable Mention for the Reusable To-Go Program
- Students are welcome and encouraged to attend the Environment Virginia Conference each year at VMI, often at a discounted rate. Committee will keep students informed each year.

Green RFP Results

- 12 projects approved, submitted by 8 student groups, totaling \$125,410 in funding:
 - President's Quad LED lighting \$70,070
 - Pritchard study lounge LED lighting \$11,440
 - OZZI reusable to-go containers \$6,150
 - Outdoor LED lighting for President's Quad & West End/Cheatham Hall \$5,000
 - Water bottle refill stations (Cowgill, Burchard) \$8,500
 - Stroubles Creek Riparian Restoration \$5,500
 - Water bottle refill stations (Latham Hall) \$5,000
 - Water bottle refill station (Derring Hall) \$2,500
 - Y-toss residence hall collection bins \$1,225
 - Native trees for Sustainability Week 2018 & Earth Week 2019 \$5,000
 - Pollinator project in Hahn Horticulture Garden \$225
 - Stadium Woods infrastructure upgrades \$4,800
- 48 total proposals received, highest number of proposals we have received in history of program
- Second highest dollar amount we have received in history of program
- From the Committee's priority list containing 17 proposals, the following were NOT funded:

- o Reusable cups Owens Hall
- Ceramic mugs Deet's Place
- Comprehensive waste visualization plan for Dining Services
- Cupanion rewards program
- LEED signage in residence halls
- Solar Table RFP from 2016-17 being installed on 4/26 near New Classroom Building, can accommodate multiple laptops at once
- Question: Do the students who did not get approved get feedback? Yes. Both the students and university officials involved in signing off get a letter about why they didn't get funding

Earth Week Wrap-Up

- Events included Stadium Woods walk, SolarFest, Duckpond & Stroubles clean-up, Tree Planting, panel speakers, & more
- Question: How has engagement compared to past years? Engagement was higher due
 to expanded social media efforts, official VT Snapchat takeover, and individual student
 group support. Weather is always a challenge, but event turnout was high.

Policy 5505 Update - Scott Kerklo

- Sub-committee is working through the summer to engage stakeholders and create new draft by early Fall
- Sub-committee is looking at other policies that 5505 references, and still taking deep dive into document

New Business

Campus Energy Management - Ruben Avagyan

- In FY17 there was a slight increase in consumption due to new buildings and adding more square footage
- Energy costs are going down and driven by fluctuations in rate of utilities
- Square footage of campus is constantly increasing, but energy intensity is staying flat despite this growth
- Carbon footprint is on the decline because the energy we are purchasing from AEP is becoming cleaner
- Office of Energy Management responsibilities
 - Monitor and analyze energy use (210 buildings)
 - Set energy reduction goals
 - Complete retrofit projects and verify savings
 - Report statistics
- Key initiatives: trying to use less coal, move toward natural gas, energy audits, benchmarking system, 5 year action plan, and in-house audit team
- 5-Year Energy Action Plan: 50 energy hog buildings, only represent 35% of grounds, but 70% of utility costs. Most intense are labs because of ventilation and stabilizing air changes

- Trying to find ways to reduce ventilation rates when labs are not in use, not run things 24/7. Biggest energy hogs are Hahn North, Hahn South, Derring, Litton Reaves, and Vet Med
- FDD tool acquired in 2017, collect energy info and find inefficiencies
- Question: Can you break usage down by floors and areas of specific buildings? Not always. Newer buildings have sensors, but older ones just have one meter to track entire building use.
- Question: Is coal-free power something we could see in the near future? No. With
 resource availability, we don't have a backup to natural gas, and we can't go below 20%
 coal or we would have to shut down boilers.
- Early 2018 there was a huge spike in natural gas prices, we needed a reliable source of energy, and coal was our backup.
- Question: What other types of renewable energy can we advocate for? Solar. Large scale solar is cost effective and the technology is advanced.
- Question: Is there any possibility of doing geothermal on new garages or buildings?
 Started the research a few years back, problem is we need a lot of space, 50 acres to support whole north precinct, if we had separate units on each building, it would be a nightmare. Bedrock is a concern, it is feasible, but hard and expensive to do.

Composting on Campus - Gwyneth Manser

- VT has been composting since 2009
- Generates over 600 tons of compost per year
- Royal Oak Farm is current composter
- How it works: dining centers produce the compost materials, BRS picks up daily and transports to Prices Fork facility, Royal Oak farms picks up material from Prices Fork facility 1 - 2 times per week, Campus Farm buys back some of the processed compost from Royal Oak.
- Compost started at Southgate Center in 2009, expanded to dining halls shortly after, dramatic dips and spikes in tonnage correlates with academic schedule.
- Cost per tons has trended down slightly, but we switched composters in 2015. PME
 Composting was located in Floyd, went out of business unexpectedly, and since going
 with Royal Oak, costs have risen and will continue to do so.
- Bottom line: composting is REALLY expensive, and Dining Services covers whole cost.
- Cost per ton:

Landfill: \$54.50Recycling: \$30.00Compost: \$135.4

- Question: Is an on-campus composting facility a possibility? Yes. Currently under discussion with CALS, Kentland, and Dining Services.
- Question: Could composting expand beyond Dining Services? Potentially. Dining-only is not a sustainable, long-term solution.
- Jeremy Smith has offered a piece of SGA legislation in support of on-campus composting facility (sending to Denny)

Green Lab Initiatives - Linda Correll & Barbara Wise

- Linda Correll representing LabConnect goal is to connect lab operations together to use synergies
- Labs are energy hogs that create a lot of waste and unnecessarily use energy
- If you are connected to labs, please talk to folks who can make changes
- Lab Exposition took place on 4/3
- Theme was Sustainability, invited Alison Paradise from My Green Lab
- UVA's Green Lab Certification is a great example of what we could implement
- Styrofoam recycling initiative Ellen Garcia started a small-scale initiative and would love to see it grow, taking items to RADVA from Biocomplexity Institute, Life Sciences 1, and HABBI, 75% recycling rate
- Pickup problem with RADVA, this does take oversight and management, some folks are willing to do it but not all
- Next steps from Exposition meeting:
 - LabConnect strategic planning
 - Karlee intern project
 - Toolkits with Energy Management office
 - Procurement identifying green suppliers
 - Add research lab sustainability initiatives to annual report
 - Hokie Swap improvements to include lab stuff
 - STARS credit number OP19 (animal bedding and lab equipment)
- Can any of this be translated into 5505? Sub-committee will research