ENERGY AND SUSTAINABILITY COMMITTEE MEETING

January 25, 2016 Room 325, Burruss Hall

MEMBERS:

Members Present: Kayla Smith (for Sherwood Wilson), Savita Sharma (for Dwight Shelton), Frances Keene, Denny Cochrane, Ruben Avagyan, Steve Mouras, Rob Lowe, Tim Baird, Bruce Obenhaus, Katie Reeves, David Mellichamp, Devita Mccullough-Amal, Allison Homer, Melvin Amos.

Members Absent: Chris Kiwus, Jason Soileau, Sean McGinnis, John Chermak, Sydney Lavery, Richard Benson.

Recorder: Emily Schosid.

Guests: Emily Schosid, Rial Carver.

1. Welcome & Introductions E&S Committee Members

Mr. Mouras called the meeting to order at 2:00PM

2. Approval of Proposed Agenda

Mr. Mouras asked for changes to the agenda, and receiving none, the agenda was approved.

3. Approval of November 16, 2015 Minutes

Mr. Mouras asked for changes to the November 16 minutes, and receiving none, the minutes were approved.

4. Old Business

a. 2015-2016 Green RFP Status and Subcommittee: Denny Cochrane

Mr. Cochrane gave an update on this year's Green RFP program. This year, the Sustainability Office pushed the due date for proposals back a month and then added more time for a "technical review" before bringing proposals to the E & S Committee. As a result, the program received 35 proposals from 18 students/student groups—the most ever! Beyond getting more proposals, the proposals were, overall, of higher quality than in previous years. Of the 35 proposals, 18 of them will be advanced to the E&S Committee for review (Category 1). There were a few proposals that fell into Category 2, which means that they are good ideas but had too many questions to answer before we can advance them for real consideration. The rest of the proposals fell into Category 3, which were proposals that did not support the sustainability goals of the university or which can be supported with funds outside of the Green RFP program.

The next step of the process is to select a sub-committee to review the proposals before they go to the Budget Office. Asking for volunteers, it was determined that Mr. Cochrane will serve as the chair, Mr. Obenhaus will serve as the faculty representative, Mr. Lowe and Ms. Reaves will serve as staff representatives, Ms. Mccullough-Amal will serve as a graduate student representative, and Mr. Amos will serve as the undergraduate representative. The sub-committee will present their recommendations at the February 22 Committee meeting.

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b. Single Stream Recycling Update: Denny Cochrane

Mr. Cochrane gave another update and overview of the new single-stream recycling program at Virginia Tech. Single stream recycling became the standard for all of Montgomery County in July 2015. As part of the process, the county, along with MRSWA developed standard signage for all bins throughout the county. In December, Bob's Refuse Service was awarded the recycling contract again for Virginia Tech. As part of the new contract, BRS is providing 30 new large, metal recycling dumpsters for campus with about 15 of them going to the residence hall areas as a first priority. The bins are awaiting the standard signage, but this is in progress. Indoors, the university generally uses "slim-jim" type recycling bins. Half of the lids on these slim-jims were replaced to accommodate single stream recycling last year, and the other half are in the process of being converted. The slim-jims, however, are viewed as an interim solution to recycling bins inside buildings. One of the Green RFP proposals is to purchase 150 new indoor recycling bins for campus. Ms. Carver asked if there were going to be new signage going onto the outdoor recycling dumpsters that are not being replaced. Mr. Cochrane said that it will happen as we figure out what bins are and are not being replaced. Mr. Mouras said that 30 outdoor bins were an initial estimate for the number needed for the whole campus. After that, the decision to get additional bins can be made. Ms. Sharma asked if the current number of slim-jims was sufficient for campus, and whether they all sat in hallways like they do in Burruss Hall. Mr. Cochrane said yes to both, but said that the most ideal situation would be the new recycling bins called for in the Green RFP are the preferable option.

c. Campus-Wide Sustainability Outreach: Emily Schosid

Ms. Schosid gave a summary of the major results from the Sustainability Engagement survey that was sent out at the end of the fall semester. Over 400 people participated from all colleges and most VP areas. Undergraduate students made up the largest portion of respondents. Mr. Baird asked whether the proportions of respondents matched up with the population proportions on campus. After a bit of discussion, it was determined that undergraduate students were underrepresented while faculty and staff were both slightly overrepresented. In general, the campus population thought that renewable energy, energy efficiency, and waste management were the most important issues for Virginia Tech to address. Energy efficiency and renewable energy production were rated among the issues that Virginia Tech address the least well currently, while Alternative Transportation was rated the best sustainability program by a very large margin. Mr. Baird pointed out that the second most popular answer on the question of Virginia Tech's best sustainability programs was "Don't Know or No Opinion." Ms. Schosid said that this was probably indicative of the fact that sustainability programs are not communicated or advertised enough on campus. Ms. Homer asked whether the results would be published. Ms. Schosid said yes they would be, but the best format needed to be discussed. Mr. Mouras continued that the Sustainability Office wanted to share the results with the subcommittee first, the full E&S Committee second, and then find the best ways to publish the results to campus. A news release and information on the website were both good options. Next steps include reaching out to focus groups and getting more specific input on what campus deems to be most important. The subcommittee plans to offer final recommendations to the full committee by the April meeting. Mr. Mouras said that the ultimate purpose of the survey was to find ways for the E&S Committee to better engage with the university population, so the committee can be more involved in meeting the University's sustainability needs.

d. Energy Update: Ruben Avagyan

Mr. Avagyan first gave an update on the natural gas pipeline that is being laid down on campus. The project is about 95% complete. Atmos Energy will be doing testing at the end of January and the pipeline will be in full

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use by February. The transition in the steam plant from primary coal to primary natural gas will be gradual. Eventually, the goal is to use about 80-85% natural gas and 15-20% coal. This will have a significant impact on reducing our greenhouse gas emissions, which will be valuable in advancing our greenhouse gas emissions goals set out by the CAC. Mr. Avagyan then updated the committee on the winter shutdown. The campus was at a much reduced occupancy from December 18 until January 19. The savings from this time were about \$115,000. The committee then got an update on the first phase of the 5-year energy plan. Steam trap testing is ongoing, with round #3 being completed in December. Mr. Mouras asked what steam trap testing does. Mr. Avagyan said that steam traps are installed in buildings during construction but do not always operate as they are supposed to. Sometimes they can get stuck open, which wastes a lot of energy, or stuck closed, which means that equipment that are connected to them do not work properly. The steam trap testing allows VT to find those problems and fix them. Building infrared imaging and boiler efficiency testing are both ongoing. A new program to put 200 stickers on 55 fume hoods on campus reminding people to close them is underway. Fume hoods are left open frequently, and this waste an enormous amount of energy. The stickers are hoping to address the behavioral side of saving energy. Additionally, there are some projects being discussed to address the problem from an engineering point of view as well. Finally, Mr. Avagyan described the drafting of a new Virginia Tech standards for energy efficient design for new construction or major renovations. The new standards should say more explicitly what will be allowed and not allowed in new buildings and major renovations. It is currently a draft document that needs additional collaboration with the Office of University Design and Construction and other offices. Ms. Sharma asked when the design standards would be completed. Mr. Avagyan said that they will be completed in 2016. Mr. Mouras said that all of the university design standards were being updated, so the energy efficiency chapter is part of a larger update. Ms. Homer asked what the significant decrease in CO2 emissions would be when the campus transitions to natural gas. Mr. Avagyan said that currently 40% of carbon emissions come from steam production on campus. If the school transitions to natural gas, he estimates that amount will be halved.

e. Sustainability Student Forum: Steve Mouras

Mr. Mouras gave information about the Sustainability Student Leader Forum which will occur on Feb 17 from 7-9PM. He said that this was a very successful program last semester, which the students enjoyed. This semester, the forum will focus on collaboration for Earth Week, so that the programming can be better than ever, and avoid having groups duplicate efforts.

5. New Business None.

6. Open Discussion None.

Next Meeting; February 22, 2016, 2PM - Room 325, Burruss Hall **Adjourned** at 2:57PM

Respectfully Submitted, Emily Schosid