

# ENERGY AND SUSTAINABILITY COMMITTEE MEETING

February 23, 2015  
Room 325, Burruss Hall

## MEMBERS:

**Members Present:** Vickie Chiocca (for Sherwood Wilson), Savita Sharma (for Dwight Shelton), Jason Soileau, Denny Cochrane, Ruben Avagyan, Steve Mouras, Rob Lowe, Sean McGinnis, John Chermak, Tim Baird, Bruce Obenhaus, David Mellichamp, Devita Mccullough, Sarah Mazza, Josh Barniak.

**Members Absent:** Chris Kiwus, Frances Keene, Katie Reaves, Richard Benson, Joe Jajonie.

**Recorder:** Emily Schosid

**Guests:** Emily Schosid, Angie DeSoto, Rial Carver.

### **1. Welcome & Introductions E&S Committee Members; Review Charge**

Mr. Mouras called the meeting to order at 2:01PM

### **2. Approval of Proposed Agenda**

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

### **3. Approval of January 26, 2015 Minutes**

Mr. Mouras asked for changes to the minutes. There was one change in the first Old Business section, changing "Council" to "Commission" with reference to University Support. Receiving no other changes, the minutes were approved.

### **4. Old Business**

#### **a. 2014-2015 Green RFP Update: Denny Cochrane**

Before Mr. Cochrane began speaking, Mr. Mouras announced that Virginia Tech had won a bronze Governor's Environmental Excellence Award. There were 8 organizations recognized, and VT was the only school. Mr. Cochrane reported that he and Elizabeth Hansen briefed the Budget Committee on the 6 Category 1 projects. The Budget Committee came back with several questions, which were packaged up and sent back last week. As of today, there is no word back, but Mr. Cochrane suspects we will hear back via memo signed by Dwight Shelton by the middle of next month. The project that was at the top of the Category 2 list was the proposal to fund a reusable to-go container for every incoming freshman. The Student Government Association passed a resolution to fund that project outside of the Green RFP program. This was a project that several committee members had wanted to move to Category 1—though not enough to officially move it—so he was pleased to see this project funded nonetheless.

#### **b. RecycleMania at VT: Emily Schosid**

Ms. Schosid gave a quick update on RecycleMania activities for the next couple of weeks. Last week, student interns were in the Hokie Grill helping students sort their waste in the correct bins. This week is the Social Media week, with different challenges every day. Next week, on March 4, OES will host the

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Really Really Free Market in Squires. People can donate goods they no longer want and take things they think they want and can use. This program is not necessarily for students only; faculty and staff are invited to bring and take goods as well.

### **c. Electronic Waste Management Overview: Rob Lowe**

Mr. Lowe gave an overview of what happens to hard-to-recycle and toxic materials on campus. He touched on Fluorescent Tubes, describing the process by which they are cleaned and recycled. Before the fluorescent tube recycling program, they typically ended up in the dumpster broken. There is a lot of labor involved with collecting the tubes, and VT generally recycles one pallet (roughly 700 lbs) every week. EHS also collects lamp ballasts from light poles when they go bad. Those are sent out by the barrel, and each barrel is about 650 pounds. Finally, EHS collects batteries of all sizes: exit sign batteries, car and heavy machinery batteries from Facilities, Fleet, and VTTI, and even small electronic batteries (AA, AAA, 9volt, etc). Offices can ask for battery recycling bins, and can also call if their bins are full and need to be serviced. A Green RFP from 2 years ago got several new battery recycling bins for academic buildings, which will be deployed this spring with the help of OES interns. EHS recycles old CRT computer monitors because they have lead in them. The office used to host electronic recycling events for the community, but now MRSWA does community e-waste events now. Overall, these materials make up about 2% of the university's recycling totals, but they are the most toxic.

### **d. Energy Management Overview: Ruben Avagyan**

Mr. Avagyan gave an overview of the 5-year energy action plan. This plan is part of the larger master plan, but is on a short timeline. The goals of the 5-year plan are to significantly reduce utility costs on campus, comply with state mandates for energy reduction, support the VT CAC&SP, and establish procedures to enable success for the Energy Program. In November and December, an energy benchmarking analysis was done for 225 buildings on campus. Out of those, 52 buildings were identified as "energy hogs," and together these 52 buildings make up 70% of the overall energy use on campus. Meanwhile, Governor's Executive Order #31 says that all state agencies will have to reduce their total energy use by 15% (below 2012 levels) by 2017. Mr. McGinnis asked for clarification on whether it was energy per square foot or total energy. Mr. Avagyan said it is total energy. Mr. Chermak asked if it was just electricity or all energy sources. Mr. Avagyan clarified that it was all energy sources—coal, natural gas, electricity, and others. Some ways to achieve these goals are to reduce electric demand, do major energy audits for buildings, large retro-fit projects on campus, improving the metering and data analytics abilities, and improving the heating and cooling plants on campus. Mr. McGinnis asked which of the 225 buildings were sub-metered. Mr. Avagyan said that it depends on the utility. Many buildings are sub-metered for primary utilities, but very few are sub-metered for secondary utilities, which is a big problem. The 5-year program will take place in 6 phases, and Mr. Avagyan has proposed an Energy Revolving Fund as a funding source. This means the Energy Program needs to find seed funding for the Revolving Fund. Mr. McGinnis asked if there were penalties for not meeting the Governor's Executive Orders. Mr. Avagyan said no, but they want to meet them anyway. Mr. Baird asked if there was something in common between the 52 Energy Hog buildings. Mr. Avagyan said that the Energy Hogs are all quite different, but several of them have laboratories. There are about 6 different types of buildings, and each kind of building has a unique set of energy benchmarks.

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### 5. New Business

#### **a. Sustainability Institute at CNRE: Angie DeSoto**

Ms. DeSoto gave an overview of the new Sustainability Institute. The master planning process has been happening for under a year, but the program is focused on project-based and immersive learning. The private sector is looking for graduates who have practical, hands-on experiences, while Corporate Social Responsibility is becoming a bigger and bigger deal in the private sector. Students, meanwhile, want meaningful jobs upon graduation. It is Virginia Tech's responsibility to make sure graduating students are equipped with the skills that industry is looking for in entry-level employees. Employers say that they want sustainability professionals to have a solid training in some academic discipline, a sustainability lens with which to look at that discipline, and soft skills/professional skills. The Sustainability Institute is focused on undergraduate students, since these skills are usually reserved for graduate students. The goal of Sustainability Institute is to engage current sustainability professionals to train future ones. This will happen by studying what industry is looking for in different sectors and types of positions, and connecting students with project-based, experiential learning experiences. The Institute will bring together Faculty from all colleges on campus, industry leaders, corporate partners, and others for a truly collaborative project. Mr. McGinnis asked what the program looks like on the student side. Ms. DeSoto said that it is still in discussion, but it looks like right now it will be a cohort-based program that students will apply for. The goal is to provide a certificate of completion and to have students from each college involved. Students will do projects and semester long internships. Mr. Cochrane asked how many people are involved. Right now, there is one person working full time on the project, and about 10 faculty members in the core faculty group. There will be about 6 corporate partners, and about 20 students to start next fall. Ms. Mazza asked if this would ever focus on graduate students, and Ms. DeSoto said there is an institute in the National Capital Region that focuses on graduate studies exclusively.

### 6. Open Discussion

Mr. Mouras mentioned that there were 14 applicants to the Graduate Assistant position in OES, since Stephanie Smith will be graduating this year. Mr. Mouras then asked if there were other waste issues that the group would be interested in learning about, and suggested single stream recycling for next month. Mr. Cochrane said that would be a possibility. Mr. Chermak asked if there was a possibility to discuss local food on campus. Ms. Carver said that right now 13% of purchased food was local, according to AASHE standards, and said she would be happy to present in more depth next month.

**Next Meeting;** March 23, 2015 - Room 325, Burruss Hall

**Adjourned** at 3:04PM

Respectfully Submitted,  
Emily Schosid