**C**ampus   
**E**nvironmental   
**S**ustainability   
**T**eam

**Minutes**November 28, 2:00 – 3:30 pm124 Administrative Building III

Attendees: Bill Winner, Walt Robinson, Brian O’Sullivan, Brian Jones, Mike Harwood, Erin Champion, Liz Bowen, Jonathan Casper, Tracy Dixon, Lisa Maune, Paul McConocha, Lisa Johnson, Lindsay Batchelor, Sarah Ketchem, Jack Colby, Jeff Hightower, Barbara Doll, Marshall Bowden

**Welcome**  – Bill

**SuSTATEable**

SuSTATEable will be a regular segment on the CEST agenda to learn about sustainability progress connected to the Sustainability Strategic Plan.

Topic: Behavior change research and influencing “greener” athletics – Jonathan Casper, assistant professor, Parks, Recreation, and Tourism Management

See references documents discussed:

* Technical Report-Mens Baseball Game
* WorldviewWhitepaper – Sheldon Group
* Sports Management focus
* NCAA environmental sustainability research
  + Surveyed/interviewed division 1 athletic directors to determine level of sustainability in operations. Surprising results
    - Yes: mostly recycling, some very proactive. Textbook on results coming. In most cases Athletics department not coordinating with university
    - Greening events to help green actual infrastructure and change behavior
* At NC State
  + Trying to get sustainability into Athletics strategic plan
  + Sustainability piece on gopack.com
  + Trying to coordinate communications at NC State and NCAA
  + Research on how to have students have stake in sustainability (values, believes, norms – VBN – model)
  + Green baseball game – surveyed spectators about attitudes and expectations. Results: students and nonstudents expected sustainability at university wide level. Expect certain items (recycling, education on energy savings, transportation initiatives, etc). Comments from at least 20 people indicated favorable comments on NC State thinking about sustainability. People didn’t know about greening of game until got to game. The people that knew the most visit the sustainability table. Didn’t really take note of the sustainability PSA. Liked the recycling pick up after the game. Did post survey as well.
  + Athletics can be a good showcase for sustainability. Hoping to market and communicate another event in the future. Also doing more at the game.
* Shelton’s Sustainability Segments – 23% actives (greenest), 33% seekers, 16% indifferent, 28% skeptics (least green)
  + Jonathan hopes to design marketing to focus on groups as showed above
  + Last 2 most important for Athletics
    - For skeptics what appeals is call to duty
    - Think most students in indifferent category. Money and personal benefit appeal most to this group.
    - Ohio State study looking at lower 2 tactics and how effective

Question: what are other schools doing that we aren’t

Answer: We have this documented. Most successful universities have coordination between university and athletics (examples: University of Nebraska, University of Colorado, and University of New Mexico)

Question: How bring all groups along since all apply to NC State?

Answer: Want to market to those involved as well as those that don’t know about sustainability programs. Need tactics to address both.

Question: How feel about Athletics departments counting carbon footprint – include athletic events?

Answer: Not many have included events. Yale and University of Florida have. Most are looking just at Athletic departments.

Question: Do you think if done survey at football game instead of baseball game, think results the same?

Answer: Not sure. Awareness might have been more aware because would have looked online. Think got fairly representative sample. Plan to redo survey if do a football game.

**Tactical plan and implementation updates** – Jack and Working Group Chairs

Sarah K (Waste Reduction & Recycling)– 2 students will be working with Sarah on tactics. One student working on food issues, another getting course credit. Hoping to make recommendations to Talley and Atrium. Planning a working group meeting.

Lisa J (Land Use) – Planning a working group meeting. The master plan update will start next year. Early fall kickoff. Advisory team and task forces identified in spring. CEST will have a lot of involvement. Space study – possible joint effort with Auburn.

Paul M (Energy and Water) – had end of October working group meeting. Provided update on energy and water trends and projects that have happened. Outcome was that one of the Environmental Science students clearly aligned each tactics with Strategic Energy and Water management plan.

Lisa M (Buildings) – meeting scheduled for Dec. 13. Identified key people to take on key tactics. Had to modify 2 tactics to make more measurable and achievable. Rachel Patrick developing LEED block credits.

Tracy D (interim Community and Culture) – Approaching individuals about chairing the Earthwise Awards to elevate program to campus awards level, rename, restructure, and include more students and faculty. Will be starting up a sub group to look at creating a sustainability policy and will be asking for a representative from each chair. With Rick Gardner as chair the Earth Day committee is moving full speed ahead.

Brian O (Transportation) – Realizing institutional barriers to some strategies. The strategies are raising the right conversations. There is a consultant working on a campus mobility study (part of this is mobility between Centennial and Main campus). Bicycle and pedestrian master plan and other efforts will make alternative means of transportation easier and more enticing.

Bill W (Academics and Research) – Preliminary conversations with several colleges about a sustainable energy minor. Each college could put forward courses within structure but there would be core courses such as ES 300. Excited about Environmental Sciences students engaging with CEST efforts. Students from any program helping with efforts will help change the culture. Another way to improve culture is staff giving lectures in culture. Paul M and Tracy D have been talking about energy production and use on campus and the campus as a case study.

**Establishing metrics for tracking** – Jack

* See proposed metrics document: “CEST metrics draft”
* Working group chairs should plan to finalize metrics by the January 18 meeting
* Need way to assess where we are and show progress towards strategies over 5 years. Need to use numbers to do this. Each year NC State has reported data and now focusing on STARS program. Therefore need to have right metrics in place to track focus areas.
* Tracy and Lindsay provided draft metrics. Some are straightforward, others need to modify a bit more. Need to have numbers that are digestible by and meaningful for public.
* Management metrics to understand what is happening to understand what is going on. Does not mean we should not have those but need to pin down metrics use for annual reporting.
* Ask each working group chair to add to meeting agenda to pin down metrics. Look at from campus community perspective (not management metrics).

Question: Have other universities done similar metrics?

Answer: some metric transportable, others are not. Example diversion rate. STARS is the attempt at standardized metrics. However, we have some campus specific metrics.

Question: Should have multi tiered definition for sustainability in courses so at least have benchmark. Some will agree, some will not.

Answer: thought though level of work required to set definition(s) and collect. Thought from standpoint of student and have been thinking along the lines of btu per student credit hour so can understand where true source is so can direct efforts.

Question: Considered measurement of toxic waste? Considered storm water (% impermeable space, # storm water devices)?

Answer: Some regulated but rather attack at source and not purchase in the beginning.

**LEED construction projects**

What is role of CEST in announcing projects? Involve CEST in announcement to raise visibility of group and its work. We will bring this up at a future meeting.

**Group photo for CEST web site**

* Postponed to future meeting

**Status Updates**

* The draft SSP tactical plan is now online.
* The Annual Sustainability Report is online and you should have received a hard copy.
* At the direction of the CEST co chairs, Tracy is approaching individuals about chairing the Earthwise Awards
* Tracy will be pulling together a small working group to discuss development of a sustainability policy as outlined in the SSP
* Despite a cold and rainy day, Campus Sustainability Day was well received. Attendance was approximately 200-300. The Halloween theme and fun games were a hit.
* At the helm of Rick Gardner, the Earth Day planning team is ahead of schedule. Committee roles have been assigned and a theme of, “green jobs,” has been selected.
* The Phytotron self performed energy performance contact has been approved to proceed with designer selection and design. The $6 million project will renovate buildings systems and result in energy savings of ~$450,000/year
* Facilities Operation Support Space is the first LEED silver certified building on campus
* Jeff Hightower started the greenhouse gas inventory with help of ARRA funded students

Marshall Bowden introduced himself. He is the president of the Biofuels Research and Implementation Club (BRIC). If anyone has leftover oil from frying a turkey he’d like. Trying to get student made biodiesel in campus operations. Is talking Dairy and Grounds Management.

Question: How much can you make and how much do you sell it for?

Answer: 60 gallons/ batch and can make 2 batches at once. After a week could make ~120/gallons a day at upper limit. Sold fuel to members to cover costs.

325 Adjourn