Environmental Caucus Agenda
Wednesday, October 12, 2011, 12:00 – 1:30 p.m.
ARD Large Pod (Building 56)

Attendees: Hesham Elnagar, Liz Wiggen, Shelley Silbert, Rom Coles, Avi Henn, Jason Lowry, Kathree Rose, Hannah Stitzer, Cynthia Kosso, Paul Gazda, Lauren Berutich, Erik Schiefer, Eva Putzova, Jon Gustafson, Tim Clark, Laura Hueneke, Brian Chase, Lindsay Wagner, Steven Boyd, Will Travers, Nick Koressel, Scott Perelstein, Casey Fischer, Blase Scarnati, Spencer Plumb

I. Introductions and Announcements [12:00–12:10]

A. Shelley Silbert- Native American Cultural Center: Grand Opening, and silent auction, Friday, Oct. 14th, 3:30 pm at Field House and 4:30 pm (auction) at NACC, across from Cline Library

B. Spencer Plumb – First Solar Mosaic PV panel project in Flagstaff on Murdoch Center. (crowd-source funding). By using NAU’s constituency to invest in solar panels. As the institution uses the electricity they pay back investors over 7-10 years.
   i. 8 kilowatt system.
   ii. Makes up 60-70% of electricity use.
   iii. Will save over ~$70,000 over two years.
   iv. How you can help:
      1. Use website (solarmosaic.com)
      2. Buy tile (need 201 tiles) for one hundred dollars each. (interest free).
      3. Tell others about project
   v. Idea of holding an event where the EC is a part of an event to sell more tiles; would love the support of the organization

C. Kathree-Applied Indigenous film festival through Cline library, environmental focus. See Cline Library website or Green NAU for upcoming films.

D. Scott- Bike Auction/sale huge success this year. Money goes toward yellow bike program.

E. Blase-Thurs. Oct. 20th, 2:30-4:30 Meadows Room, Dubois: Co-creating the knowledge commons. Civic agency- reclaiming the ‘public-ness of University’

F. Lauren- Facilitator for the ARTS. If anyone is interested in getting their students involved, contact her. She can be a great resource. Web Page: http://cbarts.weebly.com

II. EC Business [12:10-12:30]

A. Introduction of the new EC Associate Chair- Scott Perelstein, Associate director of Facilities, Residence Life. Scott serves on EC Transportation Action Team, Residence Life Sustainability Committee, and BothHands community board. Welcome and thank you!

B. Update on Coordinating Committee for Sustainability (Shelley Silbert)
   i. President Haeger requested, under provision of Provost Liz Grobsmith
   ii. Will include an update on each agenda for the EC. Would like to get
feedback from caucus.

iii. First meeting was introductory to outline the areas of responsibility each committee member, the areas that report to him or her, and to explore ways in which sustainability efforts cross-cut university divisions. This will be a step towards creating a plan for communication, integration, coordination, and cooperation.

iv. Group will have ability to make recommendations that should help in prioritizing and implementing sustainability initiatives on campus.

v. Follow up question: Will meeting minutes be posted online?

C. Update from Office of Sustainability (Nick Koressel, Sustainability Specialist)
   i. Video conferencing project.
      1. ITS curtailed videoconferencing services due to budgets.
      2. Goal is to offset travel expenses/emissions
      3. Exploratory phase - is this project worth continuing?
   ii. Green Office certification program to reduce printing, recycle, more ‘green’ practices.
      1. Please email Nick if you are interested in helping/ideas/questions

D. ARD Landscape Update (Shelley Silbert)
   i. Group met last week to discuss ARD landscape project.
   ii. Went over the history of the landscape, ideas of what could be done for student groups, ARTS, community. (Lots of great ideas.)
      1. This project could lead to an attractive and exciting site for student engagement and community involvement at the center of campus.
      2. If interested- let Shelley know.
      3. If you are a professor and want to get students involved, let us know.

E. Student Environmental Caucus (Hannah Stitzer, Student EC Co-)
   i. Action teams- formed and began working
   ii. Sustainability Committee formed to represent students on campus, get student orgs. involved.
   iii. Student EC. Meetings: Fridays 3 pm at HLC

III. Presentation: NORESCO Energy Audit at NAU [12:30–1:00]

A. Lindsay Wagner - Two step process. NORESCO was successful respondent to RFQ.
B. Will Travers and Steve Boyd gave presentation.
C. Looked at the Climate Action Plan. Lines up directly with what NORESCO does for a living.
   i. underlying theme is carbon neutrality.
   ii. NORESCO believes NAU can reduce carbon footprint to 1990 levels earlier than 2018.
D. Now in Investment grade audit phase.
   i. Project itself is what the audit will yield.
   ii. Catalog all power use at NAU.
      1. This information shapes the project
2. Savings in energy costs pays back project costs and many times exceeds.
3. No funds coming out of capitol budget
   iii. Brian Chase - $9 million spent annually on utilities. 1 million is wasted (inefficacy)
      1. Identify energy savings
      2. The ‘wasted million’ will pay for new projects to increase efficiency.
   iv. “How do you pay for stuff?”
      1. Wasted money on inefficacy
      2. Savings reallocated
E. NOW- in first phase (audit) so we accurately calculate energy savings
   i. Establishes scope of work and verification methods for savings
   ii. Why is it important? It documents savings, establishes scope, provides a financial document for University
   iii. This is also a financial audit- identifies construction costs, fees, etc.
      1. Future- design (1-2 years) and put into reality, construction
F. Utilizes existing utilities. (Finance the project with the savings from utility bills)
   i. Self funding
   ii. Incentives: fed. Government, grant opportunities
G. Building systems, lighting, heating and cooling, water use, and irrigation are the focus.
   i. Counting light fixtures
   ii. Enhances environment
   iii. Some need new design (example: Wall Aquatic Center needs new lighting design)
   iv. Energy management system: regulates heating and cooling to conserve energy.
   v. Expanding campus-wide energy management for better control.
      1. HVAC upgrades for efficiency
      2. Information helps you make good decisions (metering)
      3. Information to central location (via software) that evaluates and helps people make good decisions.
H. Water Savings Projects
   i. irrigation systems
   i. Toilet valves, tank types
I. Will have significant impact on carbon footprint.
   i. 20-30% reduction is typical
   ii. Currently: 80,000 metric ton over last 5-10 years.
J. Question: looking at equipment/vehicles not connected to buildings?
   i. right now focused on buildings, but will incorporate on later phase.
   ii. Is an important piece.
K. Behavioral change?
   i. Lindsay- in early stages of launching that. Student led.
   ii. Noresco has put together curriculum and tried.
iii. More information on website.
iv. Residence life green student room program.

L. Incentives for departments to reduce energy?
i. Utilities are paid out of the general fund.
ii. What incentive would work? Neat idea, but in reality who does it, is it successful?
iii. Brian Chase- People are unreliable. (That is the problem with behavior change).
   1. IT- 3-4% of electric bill are monitors that stay on all night. We could save a lot of money here.
   2. We are trying to eliminate energy waste.
iv. Avi- must consider what we are promoting? Culture of sustainability.
   1. Engage students, faculty in behavior change, ‘we all have stake in this.’
   2. People were responsive.
   3. Ask: Is it cost-effective?

M. What level is carbon neutrality?
i. Accounting for ALL energy consumption
ii. Once you get baseline down, you use renewable energy, etc.
iii. These technologies are still evolving and coming down in price.
iv. Get ‘biggest bang for the buck.’
   1. Brian Chase- plant several million trees to offset carbon (long term) not just on campus. Where would it fit?
   2. Will still use energy. Can’t offset everything.
   3. Credits/Debits: doesn’t have to all be occurring here, but over-all

N. Eva-Idea of financing cycle? Lessons learned?
i. 10-25 years, here 10-15 year range
ii. Tend to be conservative
iii. Exceed savings 99% of the time.
iv. Brian- at the end of 7-10 years everything is paid off.
   1. Eva-Can you finance with NAU’s investment money?
   2. Brian- variety of ways to do it, can save a couple million dollars

O. Shelley- Grant proposals: who is responsible for that?
i. blend of both: NORESCO cannot apply on behalf, but can support with documentation, work with, and send ideas.
ii. NORESCO will do research on opportunities. Many are tailored for specific projects.
   1. Are there grants for bio-mass plant using small diameter trees for forest thinning?
   2. Yes- definitely.

P. Eva-Emissions levels with campus student population taken into consideration?
i. Did we look at population levels for these dates?
   1. Will- as you are adding students, levels are staying flat which infers efficiency.
   2. Goal is regardless of population- Laura
   3. Lindsay: student pop. Doesn’t play that large of a role, electricity
is the most noticeable.

v. Avi- more of a function of info structure.

1. Need to evolve in use of off-sets, innovative ways.

Q. Behavioral audit- student driven

**IV. Discussion item: No Impact Man WEEK (Jon Gustafson)**

A. Lessons learned- what to do in the future:
   i. Students are a tough audience to reach. (busy and stressed)
   ii. Voluntary participation is difficult

B. Being visible on campus:
   i. Seeking activities that promote sustainable activities: “bling your renewable water bottle” that are accessible.
   ii. Not a lecture or film screening, but developing connections through libraries, office of SUS.

C. Planning events:
   i. Get professors involved in the planning process as soon as possible.
   ii. Collin Beaven- sold out event.
      1. 1,500 attendees
      2. This was the signature event.
   iii. Others feedback: plan as early as possible, imbed into regular activities

**Next Meeting:**
Friday, November 18, 2011, 12:00-1:30
ARD Large Pod