

## **Environmental Issues Committee**

February 16, 2011

12:00 PM

Umpqua River Room, EMU

### **Members in Attendance:**

Art Farley, Steve Mital, Christine Thompson, Lauren Wirtis, Jennifer Ellis, Alan Dickman, Deborah Exton, Heather Brinton, Ramah Leith, Jennie Leander, Christian Pich, Peg Gearhart, Nathan Howard, Zachary Stark-MacMillan, Wesley Thompson, Doug Brooke, and Louisa de Heer

### **Meeting Minutes**

**Steve Mital began the meeting by addressing the issue of adding Louisa de Heer, the new Sustainability Coordinator, as an ex-officio member of the Environmental Issues Committee.** Since it is the middle of the academic year (which ends in June) it is not possible to add Louisa as an ex-officio member, only to invite her to come to the meetings and participate. Steve added that, over the summer, when new appointments are made, he would make sure that the Louisa and whoever holds her position in the future will be made an ex-officio member as of Fall 2011.

**Art Farley asked for comments on the EIC's November meeting minutes or a motion to approve the minutes so that they could be posted.** Issues concerning the list serve were brought up and Steve Mital said that he would have it figured out by March and, until then, just copy and paste everyone's email. The minutes were unanimously approved by the committee.

**Art Farley announced that the first item on the agenda was a presentation by Christine Thompson and Steve Mital about the Oregon Model for Sustainable Development (OMSD).** Christine began the presentation by providing some context for the policy proposal. About 10 years ago the Sustainable Development Plan was established on campus. It was a novel and comprehensive plan for constructing buildings and developing the campus in a sustainable way. Since 2000, many things have changed in regard to sustainability suggesting that the university could and should do a better job. The Climate Action Plan (available on the Office of Sustainability website) triggered an initiative to readdress the issue of new building construction. The presentation the committee is about to see has already been presented to a group called the Executive Leadership Team, consisting of the President and several Vice-Presidents on campus, in order to get their "Okay" for the direction this policy takes given the cost implications. Their response was "Yes, we support this. [Now], go talk to people on campus and get feedback." After getting feedback from the campus community the policy will be submitted for a formal public hearing and be reviewed by the Campus Planning Committee with the hopes of presenting a final policy to the Executive Leadership Team in June 2011. Therefore, today the goal is to get feedback

from the committee as well as suggestions regarding other groups on campus who should to whom this idea should be presented. Next in the presentation, Steve Mital is going to explain how the policy would work and then he will hand the floor back to Christine Thompson to explain what the policy would cost and how it would be financed.

Steve Mital began his explanation of the OMSD by drawing on its three themes: energy, water, and people. Starting with energy, Steve related a personal story in which he compensated for an 800 square-foot addition to his household by making sustainable improvements (more efficient heating, windows, appliances, etc.) so that there would be zero net increase in energy consumption. Next, the university asked the design team at Allen Hall, where an addition of a similar ratio of existing to new space is being constructed, if they could compensate for addition's energy requirements by "harvesting [it] out of conservation and efficiency upgrades in the existing part of the building." The project has not yet broken ground but the implications are that such a design *is* possible. Thus, we now have examples from the residential and commercial sector and are hoping to scale up this concept across campus. The policy would be implemented as follows:

The first feature is that a ceiling is established on energy consumption on campus. The UO campus is expected to grow by as much as one million square feet in the next 10-15 years (about 20% growth from the current 6 million square feet campus occupies). The goal is to allow that expansion without any additional energy use from Northwest Natural or EWEB. As a result, all new construction would have to meet the Leadership in Energy and Environmental Design (LEED) Gold standard and be certified as such. Furthermore, all of those new projects must work with facilities and provide money to them so that facilities can use that money for energy retrofits elsewhere on campus, so that all the energy requirements for the new building is harvested out of the existing buildings. A 2009 study indicated that there is approximately \$25 million worth of energy retrofits in the UO's existing building stock that could take place and that "there is more than enough low hanging fruit to supply the next 10-15 years of construction on this campus." Now, if the new construction goes beyond the LEED Gold standard, it can trade up for the Advanced Energy Efficiency Threshold (a listing of internal criteria the UO would set) at which point the money to do other retrofits on campus is provided, at least in part, by University Central Funds. This gives the people doing the construction an incentive to go beyond LEED Gold standards because the cost to do retrofits is reduced. As a result, new buildings are paying for their lifetime energy cost up front by harvesting energy from elsewhere on campus, the university will have a stock of world class energy efficient buildings attracting both students and faculty, and all new buildings trigger energy projects that will essentially bring our 20<sup>th</sup> century buildings on par with 21<sup>st</sup> century energy standards.

The water theme of this policy addresses the fact that city code requires that all new construction treats storm water so that it doesn't pollute the Willamette River. "Existing

impervious surfaces” are grandfathered in, so there is a no-cost opportunity for the university to improve upon city code. Thus, in our proposal, whenever one of these new buildings goes up on campus it would trigger a storm water treatment activity on the property associated with that project. Also, a portion of those funds would go towards other higher priority projects on campus, so that the same number of acres treated for storm water would remain the same but the water returned to the Willamette River would be cleaner.

Lastly, the people theme focuses on the large amount of interest that will be created because of the new infrastructure to the extent that it can be used as a recruiting tool for faculty and students. Consequently, the university should take advantage of opportunities, such as adding in Dashboard capabilities so that building activity can be monitored in real time and large data sets can be archived that would be used in later research projects. “The proposal calls for money set aside from each new building project to allow [the university] to build out that infrastructure.”

Christine Thompson moved on to discuss the costs and financing of the proposal by describing several graphs that broke down the different costs. (Specific details about financing can be read about in The Oregon Model for Sustainable Development draft, attached). The main points Christine made about these graphs were as follows:

- Currently, most of our projects are achieving LEED Gold standards without being certified. The OMSD would require that the buildings be certified through LEED.
- The training cost incorporates the notion that there will be some amount of additional work where there would be “educational elements” for faculty, staff, and students using the building, opportunities for facilities who is maintaining the building, fixed plaques, and Dashboard capabilities.
- The Advanced Energy Efficiency Threshold standards are still being determined, which is why the cost is unknown. What is currently being tested is a standard where a building would be 60% more energy efficient than a standard building of that same type (a number that was derived from the Architecture 20-30 program).
- 1.5 million square feet of expansion over the next 10-15 years would cost “no more than \$18 million.” However, the added value of those additional buildings will amount to approximately \$700 million.
- Since some buildings use more energy than others (lab facilities, in particular, tend to use a lot of energy), if after complying with all aspects of the policy the cost of implementing the conservation efforts is more than 2% of the project cost, the remaining amount would be paid for by central funds.

Christine Thompson then opened up the floor for questions and comments.

Alan Dickman said that the target of zero net increase in emissions seemed “somewhat artificial” since it’s a “factor of how careful [the university] has been in the last ten or fifteen years.” What happens in 10-15 years when the easy conservation projects have

been accomplished? It will become harder to conserve energy down the road and, therefore, a constructing a building would be more expensive in the future. Steve Mital responded that the energy manager would bundle expensive and cheap conservation projects together to derive an average cost that would remain stable over that 10-15 year period. Christine Thompson added that research has been done to determine how much it costs to conserve one BTU over a range of energy conservation measures. The main goal of this model is to have new buildings share a cost in the renovation of older buildings, since the objective of the Climate Action Plan is not net zero but a decrease in emissions. Therefore, it is assumed that additional conservation efforts will be taking place simultaneously.

Deborah Exton asked what constitutes a “large renovation.” Steve Mital replied “10,000 square feet and above.”

Heather Brinton said that she was concerned about remaining consistent with the Climate Action Plan, and if the OMSD isn’t going to require the 10% reduction in energy in new buildings, can other policy mechanisms compensate for that? Art Farley added that the OMSD would reduce the amount of greenhouse gas emissions per square foot, but not total emissions, which is the goal of the Climate Action Plan.

Zachary Stark-MacMillan inquired about construction projects that happen outside of the campus planning realm. Christine Thompson answered that President Lariviere addressed that issue during the meeting with the Executive Leadership Team and said that the total project cost that would be presented to the donor(s) would incorporate all of the additional costs without showing the breakdown of money being allotted to certification, training, education, etc. If the donor decides not to finance the entire project, it is up to the university to compensate for the rest of the cost to keep the building up on a par with university standards. Zachary followed up by asking how the university would go about applying the OMSD, for example the LEED Gold standard, to buildings financed by an outside party. Christine agreed that there is no way to impose building regulations on construction done by a third party who then donates the building to the UO. Deborah Exton noted that it provides a loophole for getting around the requirements. Christine noted that the OMSD would have the same effects and limitations as any other campus policy. Steve Mital made the point that the many people feel similarly in their dislike for the hypocrisy and that the sentiment is growing louder. In Steve’s meetings with President Lariviere, the president has made it clear that the complaint “is not falling on deaf ears.” Furthermore, Steve continued, if the policy is adopted and the university builds several buildings to this standard, either on their own dime or with help from donors, the more things go well and according to OMSD policy initially, the more pressure there will be on the university to continue upholding the standards.

Louisa de Heer said that while LEED deals with “infrastructure and elements of the physical building,” how will the policy address daily use by people and facilitate

movement through the building in a sustainable way? For example, in Lillis, the building is “top notch” but there are paper towels in the bathrooms and no place to refill water bottles. Christine Thompson replied that, as an educational facility, it seems like a necessary element, but nothing specific to education is mentioned in the OMSD policy. The purpose of the “people” theme to the OMSD is to address just this issue. Providing educational opportunities is hard to define in terms of how much energy would be saved or how much cleaner the water would be because of a particular action or initiative. The \$35,000 allotted to “training” is meant to incorporate a variety of educational projects for faculty, staff and students that seek to explain how to live in and use a particular building. Steve Mital mentioned that there is a new movement to certify buildings as LEED Operations and Management, which the facilities director, George Hecht, is working on as a pilot project for several buildings.

Heather Brinton commented that she had heard criticism about acquiring the LEED certificate and whether it was actually necessary, so what made the Campus Planning Commission decide it was worth the investment for the OMSD? Christine Thompson answered that there has been a recent study of eight schools and whether, when certifying for LEED Gold or higher, certification makes a difference, and it turns out that it does. Steve Mital gave the parallel example of taking a class for a grade versus taking it pass/no pass. If one takes a class for a grade, one will study harder, do a better job on the homework, and probably learn more. The study shows that without certification, the building does not actually end up being LEED Gold equivalent.

Jennifer Ellis asked how energy will be measured since the presentation suggested measurement in dollars. Steve Mital replied that the measurement will be in kilowatt hours and/or therms depending on whether what is being measured is electricity or gas.

Christian Pich asked about including a target of a net zero increase in waste production in the policy. Alan Dickman added that in the focal group the themes had been energy, *landscapes*, and people rather than energy, *water*, and people. The “water” theme could be misinterpreted as water usage instead of an addressing of the hydrological impacts of development. Furthermore, “water” narrows focus, so why not use the term “landscapes,” which would include waste management and all aspects of water usage, impacts and conservation? Christine Thompson replied that some of these issues would be addressed in requiring the developers to comply with LEED Gold standards, but the team working on the OMSD recognizes that LEED doesn’t cover everything. After assessing the successes and missteps of the Sustainable Development Plan, the team decided to focus on the issues that “matter most,” will have the “greatest environmental benefit,” and is something that the university can address well. So, with water the issues of conservation and usage were discussed, but “water quality ended up being the most important factor and the treatment of storm water and how it is contaminating the Willamette River” was the primary concern for university development. Waste production, Christine continued, is addressed by the university’s

recycling program and by the LEED Gold requirements. The waste from a new building hasn't really been addressed. Steve Mital noted that although OMSD is an initiative through Campus Planning, there have been discussions about involving the Operations and Maintenance Department, which would open the door to discussing issues such as life cycle analysis of the materials used in a new construction project.

Doug Brook asked about the retrofits and if the OMSD looked into the energy cost of producing the materials used to retrofit the buildings in comparison with the amount of energy the retrofits would save. Christine Thompson answered that, at the request of the Executive Leadership Team, the group working on the OMSD is trying to include life cycle costs into the policy to the extent that different products have different life cycle costs and encouraging developers to use those products which are more long-lasting.

Zachary Stark-MacMillan asked how people joined the Sustainability Round Table. Christine Thompson said that the group was part of an office initiative within Campus Planning in the early stages of developing the OMSD that aimed to educate faculty and staff from Campus Planning and Facilities. Experts were brought in to present their knowledge about the kind of work, the challenges, and the benefits of a program like the OMSD. Zachary replied that he thought it might be helpful to have students on the board. Christine noted that it was meant as an initial learning experience, but there is certainly still an opportunity for student involvement in reviewing and improving the OMSD.

Art Farley asked when Christine Thompson and Steve Mital expected to be finished reviewing the OMSD. Christine answered that the goal is to be done by June 2011.

Louisa de Heer inquired if the OMSD was going to replace the original Sustainable Development Plan and, thus, have room to grow into a more comprehensive plan that addresses other issues like land use. Christine Thompson replied that the OMSD will fit in as a part of the overall Campus Plan, which determines where buildings go, where open space remains, how dense buildings can and should be, etc. Christine commented that while the OMSD may seem limited, there are many other policies already in existence that address the issues that the OMSD does not (i.e. transportation).

Lastly, Christine Thompson asked if anyone had suggestions for groups to meet with and get feedback from, and email to that effect would be much appreciated.

**Peg Gearhart reported on the recommendations she and Christine Thompson would like the EIC to make to revise the Telecommunications policy.** Peg Gearhart summarized her and Christine Thompson's main suggestions for the University of Oregon's Telecommuting Policy. First, the "Reason for Policy" section should include the word "sustainability" so that it reads as follows:

“To provide a framework for employees and supervisors to explore and reach agreement on flexible work arrangements that enhance employee performance, **increase sustainability (eg. reduce commuting miles)**, or provide university savings, and support employee efforts to balance work, educational, personal, and family responsibilities while maintaining university operations.”

Secondly, the policy could be more proactive in terms of implementation. Language regarding this issue could say something to the effect of: “In addition to responding to employee initiated requests, supervisors are encouraged to consider ways to proactively implement this policy particularly when new positions are established an/or prior to filling vacant positions.” Third, we recommended that the Telecommunications Policy be incorporated into the “Cross Reference to Related Policies” section the EIC suggested adding to the UO Comprehensive Environmental Policy.

Art Farley noted that the goal of creating this sub-committee was to draft a letter of recommendation on this policy from the EIC, and asked if this was the letter the committee wanted to send. Christine Thompson replied that what was attached in the agenda was more of an informal report of what the sub-committee recommended. Steve Mital mentioned that final recommendations for changes to the Telecommunications Policy are being held until the EIC sends in a letter of recommendation, provided that letter arrives in the month of February. Art said that he could take Peg Gearhart and Christine Thompson’s recommendations and draft a letter, send the letter to the EIC for final review, and then pass the final recommendation along.

Christian Pich commented that, in the Telecommunications Policy, it seems like most of the power resides with the manager. Sometimes, if managers don’t see their employees in the office, they assume the employees aren’t working. Christian asked if an employee could choose to telecommute without the permission of his/her manager. Christine Thompson answered that when she and Peg Gearhart looked at the policy to make recommendations they “put on [their] EIC hats” and tried to focus only on recommendations that were within the purview of the EIC. Heather Brinton commented that, on the other hand, the reason for a Telecommunications Policy is to encourage a more *sustainable* form of commuting to work. Christian agreed, saying that implementing a telecommunication policy would require some training and policy infrastructure to ensure that all parties felt secure within the policy and knew what was expected of them.

**Art Farley asked Steve Mital what was on the agenda for the March meeting.** Steve replied the EIC would be focusing on the Comprehensive Environmental Policy.

**The meeting was adjourned at 1:00 PM.**