Memorandum

To: Frances Dyke, Vice President of Administration Gwen Steigelman, Secretary, University Senate

From: Art Farley, Chair of the Environmental Issues Committee (EIC)

Subject: Annual Report of the EIC for Academic Year 2008-2009

The University of Oregon Environmental Issues Committee (EIC) is a working group of faculty, staff and students that serves to identify and raise awareness of environmental problems and concerns on campus and recommend University policy to address these concerns. This year has seen the EIC address several issues and provide recommendations, as follows:

In 2007, President Frohnmayer signed the American College and University Presidents Climate Commitment (ACUPCC), committing the University of Oregon to be part of an effort by higher education institutions to address global warming by neutralizing their greenhouse gas emissions and accelerating research and educational efforts to help re-stabilize the earth's climate. As part of this commitment, the University of Oregon agreed to complete a Climate Action Plan by Summer 2009 for neutralizing its greenhouse gas emissions. Drafting recommendations for this plan has been the primary focus of the Committee's work over the past two academic years. This year we completed work on our recommendations, which effort included establishing campus boundaries for application of the plan, refining emissions categories and agreeing on associated neutralization as well as monitoring/reporting responsibilities. These recommendations are included with this report as Attachment A.

As part of the University's range of possible actions for neutralizing carbon emissions under the Climate Action Plan, the purchase of carbon offsets is included. The EIC completed recommendations regarding this action, indicating situations when the purchase of carbon offsets may be reasonably considered and factors to be considered when making purchase choices. These recommendations are included as Attachment B, along with current ACUPCC guidelines.

Several other items were addressed by the EIC. The Committee was asked to endorse the Report of the No Smoking Policy Task Force, which report had been initiated due to EIC recommendations two years ago. After reviewing the Report and discussing the issue, the Committee declined to endorse the recommendations that were included there, due to a lack of clarity and what was felt to be incomplete consideration of its impacts on students and staff.

The Committee drafted and approved a No Idling Policy as a means for minimizing air pollution on campus, as well as reducing transportation-related carbon emissions. We requested feedback from affected groups, including LTD, which have found the proposal workable, as it closely follows both Eugene and Lane County's efforts. This policy is included as Attachment C.

Finally, the EIC took up the topic of establishing a temperature set-point policy for the campus. With the advent of centralized, digital control of building heating and cooling systems, a campus-wide policy for controlling building heat environments becomes feasible. More than half of the buildings on campus can be controlled or partially controlled at this time with further conversions in progress. Rough estimates indicate at least a 3% savings in energy use could be realized by establishing a reasonable temperature set-point policy. The EIC recommends that the Provost establish a task force to address such a policy and to consider associated issues (e.g., use of electric heaters and window air conditioners). We include a statement regarding this policy recommendation as Attachment D.

The EIC also considered several housekeeping issues, including committee membership and voting rights. The EIC also suggested minor changes made to the committee's charge that were reviewed and approved by Frances Dyke and sent to the Committee on Committees. The changes reflect the Office of Sustainability's role in staffing the EIC, makes more efficient use of language throughout, and deletes a committee task, i.e., "Promote research on environmental issues affecting the University community." See Appendix E for current charge, as suggested. While not a direct achievement of the EIC, the Committee now has a home web page that is maintained by the Office of Sustainability (see http://sustainability.uoregon.edu/content/environmental-issues-committee). The site presents recent activities of the committee as well as archiving past minutes and annual reports.

Art Farley agreed to serve another year as Chair of the Environmental Issues Committee for academic year 2009-2010.

DRAFT 2009 Environmental Issues Committee Report on Emissions Classifications

Summary:

In April 2007 University of Oregon President Dave Frohnmayer signed the American College and University President's Climate Commitment (ACUPCC). The University of Oregon is now preparing a Climate Action Plan (CAP) to guide its emissions reduction work. The complete document is due in September 2009. Work on the CAP is currently proceeding along several tracks. Alice Wievel, Oregon University System Director of Capital Construction, is coordinating a system-wide initiative to estimate conservation and efficiency opportunities in OUS buildings. Steve Mital, UO Director of Sustainability, is working directly with Wievel to produce an estimate for the University of Oregon. Opportunities to switch to renewable, carbon-free fuel sources are being evaluated centrally by Bob Simonton from the Oregon University System. A plan to share renewable energy across all seven institutions is being developed. The Environmental Issues Committee (EIC) evaluated normative concerns and its work responds to the question of which emissions the University should be responsible for under the CAP, what the goals ought to be, and how UO should measure progress. The following document describes an emissions classification framework which includes the responsibility the UO has in each of the listed areas, and recommendations for actions to reduce emissions in alignment with the ACUPCC.

Classifying Emissions: (from the Carbon Disclosure Project's website)

Due to the international explosion of concern over climate change and its causes governments and businesses have begun to develop emissions profiles for their activities. A commonly accepted framework for quantifying greenhouse gas (GHG) emissions soon became necessary. Several years ago the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) released <u>Greenhouse Gas Protocol</u>: A <u>Corporate Accounting and Reporting Standard (Revised Edition)</u>. It is now the standard method for classifying and quantifying carbon emissions. The Protocol defines three "scopes" for carbon emissions accounting in order to distinguish between "direct" and "indirect" emissions, to promote transparency and consistency and to ensure, as far as possible, that no two companies account for the same emissions.

- **Scope I** These emissions come from sources that are owned or controlled by a company, such as combustion facilities (e.g.: boilers, furnaces, burners, turbines, heaters, incinerators, engines, flares etc), combustion of fuels in transportation (e.g.: cars, buses, planes, ships, barges, trains etc), and physical or chemical processes. Scope I is often called "stationary sources."
- **Scope II** These emissions come from the generation of electricity by another party that is purchased and consumed by the university. Scope II is often called "purchased electricity."
- **Scope III** These covers all indirect emissions (other than from purchased electricity) that occur from sources that are not owned or controlled by the university. Examples include extraction, manufacture and production of purchased materials, transportation

of purchased fuels and use of sold products and services, business travel and employee commuting in vehicles not owned or controlled by the company, and emissions associated with waste management.

The WRI/WBCSD GHG Protocol considers the quantification of Scope III emissions as optional when preparing an overall corporate GHG inventory, as do similar protocols such as the U.S. Environmental Protection Agency's Climate Leaders program. One reason for this is that one company's Scope III emissions are another companies' Scope I or Scope II emissions. If everyone were implementing the full GHG Protocol (including Scope III emissions), it would result in the same emissions being counted a number of times. In addition, a company is not likely to be regulated on its Scope III emissions in the future, whereas it might be for its Scope I and Scope II emissions.

University of Oregon Classification of and Responsibility for Emissions:

The table on the following pages is based on the WRI/WBCSD protocol. No modifications for Scope I and Scope II emissions are needed. Scope III emissions are further delineated into Scope IIIa: Direct transportation activities, Scope IIIb: Indirect transportation activities, and Scope IIIc: Embodied emissions in purchased Goods and Services. Recommendations for the UO's responsibilities for each emissions class consistent with ACUPCC requirements are then given followed by recommended goals, actions, measurement units, and monitoring requirements.

Scope I: Direct emissions					
Definition		Scope I emissions come from sources that are owned or controlled by a company, such as combustion facilities (e.g.: boilers, furnaces, burners, turbines, heaters, incinerators, engines, flares etc), combustion of fuels in transportation (e.g.: cars, buses, planes, ships, barges, trains etc), and physical or chemical processes.			
Sources		UO Central Power Station, vehicles owned by UO, and release of refrigerants			
EIC DRAFT Recommendations	UO Responsibility	UO will take action to reduce these emissions as much as possible through switching to less carbon intensive fuel sources, efficiency upgrades, and conservation practices. Remaining Scope I emissions will be neutralized by purchase of carbon offsets.			
	Goals	Using 1990 emissions as the baseline UO will stabilize emissions by 2010, reduce emissions by 20% by 2020, and neutralize emissions by 2050.			
	Actions	Draft recommendations to be developed in consultation with appropriate consultants and UO staff.			
	Boundaries	All University of Oregon owned and operated or leased buildings and their associated fleet vehicles listed on the University's Space Inventory which is maintained by Campus Planning and Real Estate. Leased properties less than 10,000 square feet – which combined represent less than 1% of total UO owned or leased property - shall be omitted.			
	Monitoring & Reporting	Measure Scope I carbon emissions annually. The Director of Sustainability may use his/her discretion to estimate emissions from buildings where obtaining actual utility data would be onerous such as off-campus student housing. Estimation methods and the buildings that rely on estimates shall be clearly documented. Emissions will be reported in absolute terms, per building square foot, and per full time registered student.			
Scope II: Indirect emissions					
Definition		Scope II emissions come from the generation of electricity by another party that is purchased and consumed by the university.			
Sources		Purchased electricity, purchased steam, and purchased chilled water from utility			
	UO Responsibility	UO will take action to reduce these emissions as much as possible through efficiency upgrades and conservation practices. Remaining Scope II emissions will be neutralized by purchase of renewable energy credits and/or carbon offsets.			
	Goals	Using 1990 emissions as the baseline UO will stabilize emissions by 2010, reduce emissions by 10% by 2020, and neutralize emissions by 2050.			
EIC DRAFT	Actions	Draft recommendations to be developed in consultation with appropriate consultants and UO staff.			
Recommendations	Boundaries	All University of Oregon owned and operated or leased buildings and their associated fleet vehicles listed on the University's Space Inventory which is maintained by Campus Planning and Real Estate. Leased properties less than 10,000 square feet – which combined represent less than 1% of total UO owned or leased property - shall be omitted.			
	Monitoring & Reporting	Measure Scope II carbon emissions annually. The Director of Sustainability may use his/her discretion to estimate emissions from buildings where obtaining actual utility data would be onerous such as off-campus student housing. Estimation methods and the buildings that rely on estimates shall be clearly documented. Emissions will be reported in absolute terms, per building square foot, and per full time registered student.			

Scope IIIa: Direct transportation activities					
Definition		Emissions resulting from travel conducted on behalf of and/or sanctioned by the University of Oregon.			
Sources		Auto travel for university business, faculty and staff air travel, athletic staff and student travel, student travel to and from UO sanctioned study abroad programs.			
	UO Responsibility	UO will develop a method to measure or estimate Scope IIIa emissions, take action to reduce these emissions as much as possible, and neutralize the remaining emissions by purchasing carbon offsets.			
EIC DRAFT Recommendations	Goals	Reduce business travel where appropriate. Encourage transportation modes that emit fewer emissions. Develop carbon offset programs for travel emissions.			
	Actions	Work with Department of Administrative Services to develop appropriate data collection program and increase MPG requirements for motor pool vehicles. Additional recommendations to be developed in consultation with appropriate consultants and UO staff.			
	Boundaries	All UO faculty and staff air travel, athletic staff and student travel, student travel to and from UO sanctioned study abroad programs.			
	Monitoring & Reporting	Estimate (or measure when possible) emissions annually. Report in absolute terms and per user.			
Scope IIIb: Indirect transportation activities					
Definition		Emissions resulting from travel to and from campus by current users that are not paid for by the University of Oregon.			
Sources		Daily commute travel.			
	UO Responsibility	UO will continue to provide and support safe low-carbon alternatives to automobile travel.			
EIC DRAFT Recommendations	Goals	Provide and expand transportation alternatives for all faculty, staff, and students. Encourage faculty, staff, and students to take personal responsibility for reducing their commute emissions. Increase on-campus housing stock.			
	Actions	Draft recommendations to be developed in consultation with appropriate consultants and UO staff.			
	Boundaries	All current Eugene based employees and registered students attending classes at Eugene main campus.			
	Monitoring & Reporting	Conduct survey to estimate commute emissions every five years. Develop method to estimate annual emissions for each of the following four years based on survey data. Report total estimated emissions annually.			

Scope IIIc: Goods and Services					
Definition		Emissions resulting during any stage of the life cycle (manufacturing, processing, distribution, decay) of materials purchased for use by the University of Oregon.			
Sources		Embodied energy and greenhouse gas emissions in purchases (food, paper, computers, construction materials, etc).			
EIC DRAFT	UO Responsibility Goals	UO will continue to support and enhance the campus recycling program (Reduce, Reuse, Recycle) and purchase wisely. UO will not be responsible to mitigate or offset remaining emissions associated with its goods and services as these are Scope I and II emissions from the businesses that manufactured and/or provided these goods and/or services. UO will consider embodied energy in all of its purchases and reduce these related emissions through smarter purchasing			
Recommendations		decisions.			
	Actions	Draft recommendations generated by appropriate consultants and UO staff			
	Boundaries	To be determined.			
	Monitoring &	To be developed as tools and procedures become available.			
	Reporting				



DRAFT University of Oregon Carbon Offset Purchase Guidelines

The University of Oregon is a signatory to the American College and University Presidents Climate Commitment (ACUPCC). As such, the University is responsible for neutralizing carbon emissions from the campus energy plant, purchased electricity, all university funded air travel, and emissions resulting from faculty, staff and students' daily commute.

The University may find it necessary to purchase carbon offset credits on the free market to reduce these greenhouse gas emissions. When this occurs, the University will follow the current ACUPCC Voluntary Carbon Offset Protocol (see appendix).

Additional guidelines for purchasing carbon offset credits and the situations that will trigger the need to purchase offset credits are given below:

- I. Given the status of the University of Oregon as a public institution of higher education in the state of Oregon, the following additional guidelines are important considerations for the selection of carbon offset credits to be purchased. The offset projects should meet as many of the following guidelines as possible prior to consideration of cost:
 - (i) The projects offer educational benefits to UO faculty and/or students in the execution, impact, or monitoring thereof.
 - (ii) The carbon offset projects are based in Oregon.
 - (iii) The projects are public in nature, with ancillary beneficiaries being the broadest public possible.
- II. The following situations may trigger the decision to purchase carbon offset credits:
 - (i) There are greenhouse gas emissions due to campus activity for which current technologies offer no means of elimination; or
 - (ii) The university exhausts all opportunities to reduce emissions directly, including switching to carbon free sources of energy, efficiency upgrades, and conservation initiatives, yet needs to further reduce its emissions under the ACUPCC; or
 - (iii) Interim carbon reduction goals are not being met through direct emissions reduction initiatives; or

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- (iv) The point at which the cost of further eliminating greenhouse gas emissions for which the University has accepted responsibility are substantially higher when compared to the costs of reducing emissions by purchase of equivalent carbon offsets; or
- (v) ACUPCC changes policy to allow signatories to buy offsets in the current year and credit them to a future year (i.e. a banking system). These offsets can only be credited when one of the above situations occurs.



ACUPCC Voluntary Carbon Offset Protocol

November 2008

- I. Whereas, a carbon offset is a reduction or removal of carbon dioxide equivalent (CO₂e) greenhouse gas (GHG) emissions that is used to counterbalance or compensate for ("offset") emissions from other activities; offset projects reducing GHG emissions outside of an entity's boundary generate credits that can be purchased by that entity to meet its own targets for reducing GHG emissions within its boundary; it is in the interest of the American College & University Presidents' Climate Commitment (ACUPCC) institutions to ensure that investments in carbon offsets result in real GHG reductions; it is in the interest of said institutions to ensure that carbon offset projects add value to their education, research, and service missions by helping to create a healthy, just, and sustainable society...and
 - The higher education sector has the influence, the responsibility, and the diversity of skills needed to develop capabilities for society to re-stabilize the earth's climate, making its proactive leadership vital for successfully addressing climate disruption...and
 - 2. The ACUPCC is an institutional and collective commitment by presidents and chancellors to achieve GHG neutrality on their campuses and accelerate the research and educational efforts of higher education to equip society to do the same... and
 - Signatories of the ACUPCC have committed to creating a Climate Action Plan within two-years of their institutions implementation start date that will include a target date for GHG neutrality and interim milestone targets... and
 - 4. Signatories agree that the primary responsibility is to act directly to reduce their own GHG emissions by first planning, funding, and initiating programs that avoid GHG emissions (e.g. conservation), reduce GHG emissions (e.g. efficiency), and replace GHG emissions sources (e.g. direct renewable energy programs) ... and
 - 5. The ACUPCC indicates that notwithstanding the primary efforts of colleges and universities to directly reduce their GHG emissions by planning, funding, and initiating avoidance, reduction, and replacement programs, it is nevertheless important to internalize the cost of carbon emissions, and it is unlikely that colleges and universities will in the near future be able to directly achieve GHG neutrality without the supplemental investment in carbon offsets... and
 - 6. Signatories may determine investing in offsets, by developing offset projects themselves, investing directly in offset projects, or purchasing credits generated from offset projects, to be an effective way of achieving interim targets and climate neutrality and/or creating a financial incentive for reducing internal emissions... and
 - 7. When done correctly, investment in carbon offsets is scientifically valid and results in the absolute reduction of greenhouse gas emissions to the atmosphere.



- II. Therefore, the ACUPCC Institutions have developed a set of guidelines that each will voluntarily apply to any investments in carbon offsets or participation in carbon markets they may undertake as part of their efforts to achieve GHG neutrality, and that will provide guidance for making investments and reducing the risks associated with those investments. The guidelines are as follows:
 - 1. Offset projects are real and emissions reductions are additional: Projects result in actual reductions of GHG emissions and would not have otherwise occurred under a reasonable and realistic business-as-usual scenario.
 - Offset projects are transparent: Project details (including project type, location, developer, duration, standard employed, etc.) are known to the institution and communicated to stakeholders in a transparent way to help ensure validity and further the goal of education on climate disruption and sustainability.
 - 3. **Emissions reductions are measurable:** Projects result in measurable reductions of GHG emissions.
 - 4. **Emissions reductions are permanent:** Projects result in permanent reductions of GHG emissions.
 - 5. **Emissions reductions are verified:** Projects result in reductions of GHG emissions that have been verified by an independent third-party auditor that has been evaluated using the accompanying criteria.*
 - 6. **Offset projects are synchronous:** Projects result in reductions of GHG emissions that take place during a distinct period of time that is reasonably close to the period of time during which the GHG emissions that are being offset took place.*
 - 7. **Offset projects account for leakage:** Projects take into account any increases in direct or indirect GHG emissions that result from the project activity.
 - 8. **Credits are registered:** Credits generated from project activities are registered with a well-regarded registry that has been evaluated using the accompanying criteria.*
 - 9. **Credits are not double-counted:** Credits generated from project activities are not double-counted or claimed by any other party.*
 - 10. **Credits are retired:** Credits are retired before they are claimed to offset an institution's annual greenhouse gas inventory, or a portion thereof.

^{*} For more details and guidance on the characteristics of an "independent third-party auditor," a "reasonably close" time period, "a well-regarded registry," and strategies for ensuring against double counting, please see the accompanying document to this protocol: *Investing in Carbon Offsets: Guidelines for ACUPCC Institutions*.

DRAFT University of Oregon RECOMMENDED NO-IDLING POLICY May 29, 2009

Tailpipe emissions are a significant source of greenhouse gas and other emissions. These emissions are harmful to the environment and human health. In keeping with its commitment to reduce carbon emissions and model environmentally sensitive behavior, the University of Oregon's "No Idling" policy encourage campus users to adopt the practices listed below. Department of Public Safety and other units with fleet management and/or transportation related responsibilities are expected to promote but not enforce it.

- 1. All vehicles on campus should be turned off whenever idling time is expected to exceed 20 seconds. Exceptions are granted to vehicles whose manufacturer's recommended shutdown idling periods exceed 20 seconds or when vehicle idling is required (examples: unloading a refrigerated truck, passengers loading/unloading from buses).
- 2. Engine warm-up periods for University of Oregon fleet vehicles should not exceed the minimum time required to achieve required airbrake pressure and/or other critical settings.

DRAFT Temperature Set Point Policy Task Force Recommendation

The Environmental Issues Committee recommends that the Provost create a special Task Force to draft a temperature set point and building turn down policy for the University of Oregon. Such a policy could potentially save the University hundreds of thousands of dollars annually in energy costs and reduce carbon emissions. Many other institutions have implemented temperature set point policies in recent years. The Environmental Issues Committee interviewed lead Facilities staff who assure us that implementation of such a policy could be completed in less than a day due to the extensive remote digital controls in most of the buildings. A task force needs to take into consideration a variety of associated concerns including:

- 1. Building usage patterns associated with different building types (research, administrative, classroom, etc.). Temperature set points and building turn downs will need to vary across building types.
- 2. The conditions under which accessory heating and cooling units are allowed and which makes and models are acceptable.
- 3. Reasonable comfort ranges for a range of times of day and times of year
- 4. Perspectives from a wide range of faculty, staff, and students.

The Director of Sustainability can assist with identifying committee members to populate the task force, suggest a work plan and timeline, and provide examples of set point policies and other useful resources to guide the work.

ENVIRONMENTAL ISSUES COMMITTEE

CHARGE & RESPONSIBILITIES:

The Environmental Issues Committee shall:

- 1) Consider, analyze and report, in the form of advisories or recommendations on environmental issues that affect the quality of life and health of the University community, as well as on those issues about which the University should act as an educational resource. These reports shall include a financial impact statement for each recommendation as well as an informative, impartial summary of the topic that outlines its effects, the issues discussed at committee meetings, and any relevant background information;
- 2) Recommend development of rules or policies directly related to environmental issues affecting quality of life and health to be adopted by the University administration and/or University Senate on behalf of the University community. Such recommendations shall include a financial impact statement for each recommendation as well as an informative, impartial summary of the topic that outlines its effects, the issues discussed at committee meetings, and any relevant background information;
- 3) Recommend, facilitate and/or implement educational programs, training sessions, forums or workshops on environmental issues which could be offered to members of the University community and/or the general public;
- 4) Recommend ways to inform the University community about environmental issues;

In 2007 the University of Oregon became a signatory to the American College and University Presidents Climate Commitment. As a result the University of Oregon is participating in an aggressive effort to address global warming by neutralizing greenhouse gas emissions and accelerating research and educational efforts to equip society to re-stabilize the earth's climate. This commitment will be one relevant principle in guiding the committee's discussions and recommendations.

MEMBERSHIP:

Membership of the Environmental Issues Committee consists of:

- 3 5 faculty;
- 3 students who represent a cross-section of students with environmental interests;
- 2 Officers of Administration:
- 2 classified staff members:

Director of the Office of Sustainability (Ex-Officio non-voting member):

Director of the Office of Environmental Health and Safety (Ex-Officio non-voting member); and Associate Vice President for Campus Planning and Real Estate or designate (Ex-Officio nonvoting member)

STAFFING:

The Office of Sustainability shall provide logistical support for the committee including scheduling meetings, maintaining the EIC listserve and webpage, inviting guest speakers, and generating and distributing meeting minutes. The Director of Sustainability shall work directly with the Chair of the Environmental Issues Committee to develop meeting agendas and brief the committee as needed.

REPORTING:

The Environmental Issues Committee is responsible to the University Administration as an advisor to the Vice President for Finance and Administration. In addition this committee also reports to the University Senate through, at a minimum, an annual written report submitted by the Committee Chair to the Secretary of the University Senate no later than the final University Senate meeting in May. The committee may also make additional written or oral reports to the Senate.

Revised: 02/09

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