



## Overview

The University of Oregon has been an international leader in sustainability for more than two decades. The schools of architecture, business, and law have particularly well-established green reputations. Numerous faculty members in the College of Arts and Sciences and the School of Journalism and Communication are also widely recognized for their research and teaching in sustainability. Recent investments in materials science research, sustainable supply chain management, and relationship building with Pacific Rim nations, including China, position us to confront critical and emerging sustainability challenges at regional, national, and global scales. Finally, as an institution we recognize the importance of “walking the talk.” Our long-standing commitments to operational sustainability and a robust student culture that prepares graduates to become leaders capable of facing the 21<sup>st</sup> century’s greatest challenges have earned the University of Oregon a reputation as a national leader in the campus sustainability movement.

This document highlights our sustainability activities in key areas. The UO’s recently completed sustainability assessment, which focuses on campus operations, is available for download at <http://sustainability.uoregon.edu/indicators>. Perhaps the most useful tool for those interested in a comprehensive inventory of the UO’s sustainability initiatives in research, teaching, operations, and service is our searchable database at <http://sustainability.uoregon.edu/search>.

## Academic Programs

Students at the University of Oregon demand an increasingly diverse set of opportunities to engage sustainability. Departments have responded by developing more than 200 sustainability-related courses in the sciences, social sciences, humanities, and professional programs. Faculty also design and supervise service learning programs and internships that challenge students to engage issues of sustainability in a real-world context. Finally, recognizing that the City of Portland is an important hub for sustainable business and leadership, the UO recently remodeled the historic White Stag building in downtown Portland and now offers a central facility to serve its architecture, journalism, business, and law programs. This investment will create new educational opportunities for our students.

Several of the university’s curricular strengths are mentioned below:

- Numerous architecture courses train students to integrate active and passive solar features into building design, reduce lighting, heating, and cooling loads, and consider environmentally friendly materials for construction. A vigorous green

ethic permeates the student culture. One student group—the Ecological Design Center—organizes and hosts a regionally important conference focused on green design each April.

- The law school's Environmental and Natural Resources Program pioneered the first academic curriculum in public interest environmental law, and created the first public interest environmental law clinic in the nation. The law school also established an Ocean and Coastal Law Center in 1968. The work of this center addresses marine-related sustainability issues including sustainable fisheries, marine protected species, and renewable ocean energy resources. With the creation of the Appropriate Dispute Resolution Center in 2000 and the Master's Degree program in Conflict Resolution in 2005, the UO School of Law added a focus on process alternatives for addressing environmental disputes and decision-making. Currently, the UO is seeking funding to expand significantly its doctrinal and skills-related offerings in the area of sustainability, and anticipates that the success of those funding efforts will permit the school to offer numerous new sustainability-related courses, including but not limited to: sustainable business and tax policy; carbon cap and trade; and climate change law and policy. Most recently, the UO has seen the emergence of faculty and student interest in a Green Business Law and Policy Center. Finally, UO law students annually host the oldest and largest public interest environmental law conference in the world.
- The UO has been a pioneer and international leader in the area of green chemistry. Two UO professors wrote the seminal college textbook on green chemistry and run a summer seminar that has taught hundreds of faculty members from across the U.S. and the world on how to implement green chemistry protocols at their institutions. The UO chemistry program completely infuses its organic chemistry classes and labs with green chemistry processes and techniques, so much so that the number of fume hoods once necessary to expel toxic fumes have been reduced saving the university tens of thousands of dollars annually in energy costs.
- The recently launched Sustainable Supply Chain Management Center provides students opportunities to explore the intersection of sustainability and supply chain management. Students will be trained to manage environmental improvement in business practices, adopt product stewardship methods, and produce, use, and disseminate environmentally-oriented information in a business setting.
- The Community Service Center trains graduate-level community and regional planning students to work with Oregon communities on a range of issues including sustainability. In 1991, the center received a national award from the 1,000 Points of Light Foundation.
- Design Bridge, Allen Hall Advertising, and the Environmental Leadership Program provide undergraduate students capstone opportunities to work directly with real-world clients on green buildings, public relations campaigns, and environmental monitoring projects.
- Several courses in the English and philosophy departments examine root causes of environmental degradation and their ethical dimensions. The history department

trains students to think about the environmental impacts and unintended consequences of our actions.

- The Sustainable Leadership Academy offers short knowledge and skills development courses to professionals in the Portland area. Topics cover a wide range of emerging sustainability concerns.

## **Research**

In the last three years, UO researchers have garnered approximately \$31 million in public and private funding for sustainability research. Much of this research activity focuses on several of the most pressing sustainability challenges that society has ever faced. These critically important areas are identified below:

1. Reducing carbon emissions is widely recognized as the 21<sup>st</sup> century's most critical challenge. Our successes (or failures) will be felt for centuries. Buildings consume forty to sixty percent of the nation's energy and are consequently responsible for the lion's share of carbon emissions. Any meaningful attempt to reduce emissions will focus on upgrading existing building stock and designing new buildings using rigorous green criteria. UO faculty working through the Center for Housing Innovation, the Energy Studies in Buildings Lab, the Institute for a Sustainable Environment, the Solar Energy Center, and School of Architecture and Allied Arts investigate green design, compact community growth, regional planning, alternative transportation, energy efficiency, and the use of solar applications to reduce non-renewable energy demand.
2. Social conflict will result from competition over increasingly scarce natural resources and the dumping of carbon and other destabilizing pollutants into the atmosphere. Robust legal frameworks must be in place to mitigate these impacts and transition societies to a world operating under different expectations and limits. Faculty in the environment and natural resources law program and the political science department are exploring the legal frameworks necessary to help us adapt to these future conditions.
3. Green technology, especially at the nanoscale, is a critical component in the development of sustainable energy systems. Fuel cells hold great promise in distributing energy from far-flung locations where wind and wave resources are greatest. Current limits on fuel cell technology may be solved by the promise of green nanotechnology currently under investigation at the University of Oregon.
4. Conventional product design and manufacturing methods waste massive amounts of energy and resources and create and release of tons of toxic materials. Greening business practices in ways that improve both environmental and economic performance is critical. Through the Center for Sustainable Supply Chain Management, UO business faculty are investigating ways to green the corporate landscape.

The UO is also engaged in several system-wide research initiatives that leverage the expertise spread across the Oregon University System. These include the Institute for Natural Resources, the Oregon Transportation Research and Education Consortium, the Oregon Climate Change Research Institute, and the Institute for Water and Watersheds.

Finally, a recent and exciting development is a \$1 million gift from Tim and Jane Meyer to establish the Meyer Fund for a Sustainable Environment. The fund provides competitive grants to support interdisciplinary faculty research and teaching in sustainability. The fund will also support a faculty leadership in sustainability program. An annual cohort of fifteen to twenty faculty members will build capacity to conduct interdisciplinary research and help energize research and teaching interest in sustainability throughout campus.

## **Student Life**

Extracurricular activities provide students some of their most enduring life lessons. Participation in student government and clubs offer valuable opportunities for students to engage the campus and surrounding community in productive ways.

The Associated Students of the University of Oregon (ASUO) spends ten percent of its annual \$10 million budget on sustainability related programs. At least 16 student groups focus on sustainability issues at the campus and community scales. In 2003 our sustainability director, working with student leaders, created a fund to distribute \$40,000 annually in competitive grants to support student sustainability projects. Current student projects and proposals include sustainability themed residence halls, rooftop solar installations, participation in Recyclemania, a bio-diesel processor, and a sustainable demonstration house. Each year, the vice president for finance and administration “hires” student consulting groups to conduct sustainability projects that benefit campus operations and student life. This year, graduate students in the Environmental Leadership Program are creating a sustainable food guide to assist the ongoing transition in dining services to more sustainable food purchasing. The Allen Hall Advertising group is working with the office of sustainability on a promotional campaign to increase first year students’ awareness of campus-based sustainability projects and encourage greater participation in these initiatives. Finally, the UO hosts three major annual student-run conferences (HOPES, PIELC, and SBS) that greatly contribute to our reputation for cultivating an environmentally sensitive and active student body.

## **Operations**

The University of Oregon was one of the first large institutions to create a state-of-the-art campus recycling program in 1990. We have continued to lead by adding free bus passes for all faculty, staff, and students, a comprehensive environmental policy, LEED certified buildings, on-site renewable energy production, bioswales, green roofs, and several FTE to manage efforts to reduce our environmental impact, including a director of sustainability and an energy analyst.

Through smart investments in energy efficiency and green building design and construction we have bucked the national trend of annual increasing carbon emissions. In sharp contrast, our total annual emissions have remained relatively flat since 1990 despite a double-digit increase in both building square footage and student population. Our success keeping emissions near Kyoto targets is likely to generate significant national interest as institutions of higher education begin the hard work of reigning in their carbon emissions. In April 2007, the UO signed the President's Climate Commitment which compels us to make significant additional emissions reductions by 2050. Our Climate Action Plan, which will guide our work is due Fall 2009.

A soon-to-be-deployed building monitoring system will track energy consumption and greenhouse gas emissions in real time. This cutting edge technology will make real-time data publicly available at prominently displayed digital kiosks in campus buildings and via the internet. Anyone who has ever driven a Prius knows that real-time feedback encourages behavior modification that leads to energy conservation. In addition to other uses, the tracking system will make possible building report cards and energy reduction competitions in the residence halls.

### **Leadership and Service**

The UO recently convened the first of its kind Eugene-Springfield Climate Summit. President Frohnmayer invited executives from all major public agencies to participate in private discussions focusing on how to prepare the region for local impacts of Climate Change. Bi-monthly meetings supported by UO staff are on-going.

The UO plans to host the first ever OUS sustainability conference in Eugene in Fall 2008. We will bring together administrators, staff, and students to engage the latest issues and challenges in campus sustainability. One notable track will be the "Auxiliaries Summit" which provides units involved in student life an opportunity to discuss their efforts to both green their operations and engage students in the process.

In 2007 the University of Oregon was invited to join twenty-four other universities from around the world in creating the International Sustainable Campus Network. The focus is on guiding campus growth in sustainable ways. Meetings are held annually in Zurich.

Finally, an international spotlight will shine on Eugene and the University of Oregon this summer when the nation's elite athletes visit Hayward Field. Staff from the UO are working with a wide array of businesses, agencies, and non-profits to make the 2008 U.S. Olympic Track and Field Team Trials the greenest sporting event in the nation. NBC has indicated a strong interest in sharing the event's behind-the-scenes sustainability stories with its national TV audience.