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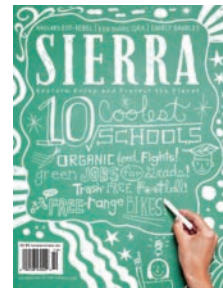
SIERRA MAGAZINE'S 2010 "COOLEST SCHOOLS" QUESTIONNAIRE



2007



2008



2009

- EFFICIENCY
- ENERGY SUPPLY
- FOOD
- ACADEMICS
- PURCHASING
- TRANSPORTATION
- WASTE MANAGEMENT
- ADMINISTRATION
- FINANCIAL INVESTMENTS
- OTHER INITIATIVES

SIERRA

Sierra, the award-winning magazine of the Sierra Club, is compiling information for our fourth annual “Coolest Schools” issue, which will rate American colleges and universities according to their environmental practices, green initiatives, and caliber of sustainability-oriented education.

Schools that score highly in these realms may be contacted for further discussion and will receive recognition in the magazine’s September/October issue. Please fill out this interactive PDF as thoroughly as possible, save it with your responses as “2010_coolschools_your school’s name” and email it to cool.schools@sierraclub.org no later than **March 20, 2010**.

Note that this questionnaire will become a public document and that we will not be altering your responses before publishing them online. Please answer as thoroughly as possible. Questions left blank will receive no credit, and if a question requests a percentage, you must provide a percentage. The scoring key will be available online once the issue is published.

As the publication of the nation’s oldest and largest environmental nonprofit, *Sierra* has a readership of more than 1 million engaged and educated citizens.

Many thanks for your participation.

School name:

Contact name and title:

Contact phone:

Contact email:

School’s city and state:

Number of students:

HONOR PLEDGE: By completing and submitting this questionnaire, you are certifying that all statements in this document are true to the best of your knowledge.

INITIAL: _____

DATE: _____

Category 1: Energy Supply

1. Please break down the energy types that your campus uses for electricity by percentage. If the school purchases its electricity from a utility company, this information should be available from that company.

____% Coal	____% Wind	____% Biomass
____% Natural Gas	____% Solar	____% Geothermal
____% Nuclear	____% Hydro	____% Other _____

2. What type(s) of energy does your campus use for heating buildings (e.g., natural gas, biomass, coal)?

____% Coal	____% Biomass
____% Natural Gas	____% Geothermal
____% Electricity	____% Fuel Oil

If cogeneration, please explain.

Category 2: Efficiency

1. What percentage of campus buildings completed within the past three years have a LEED certification of at least silver?

_____%

Note whether the certification is higher than silver.

2. What percentage of water used for campus landscaping is from recovered, reclaimed, or untreated sources?

_____%

3. What percentage of campus lighting fixtures are energy-efficient (e.g., compact fluorescent, LED, or equipped with motion sensors, automatic daylight shutoff, or other energy-saving features)?

_____%

4. What percentage of campus appliances are Energy Star-rated?

_____%

5. Does the institution have underway a program of energy-efficiency retrofitting projects, such as improving building insulation or sealing heating and cooling ducts?

Category 3: Food

1. What percentage (in dollars) of food served at cafeterias is grown or raised within 100 miles of the campus?

_____ %

2. What percentage (in dollars) of food served at campus cafeterias is USDA-certified organic?

_____ %

3. Do campus cafeterias source seafood that is deemed sustainable by the Marine Stewardship Council, the Monterey Bay Aquarium's Seafood Watch Program, or a similar program?

4. What percentage of entrées served in campus dining locations include meat? If the meat is produced sustainably (for example, free-range or grass-fed), explain.

_____ %

5. Are nutritionally complete vegetarian and/or vegan options available at every meal?

6. Is bottled water sold or distributed on campus?

7. Does your school maintain a campus farm or garden? Does it use organic methods? Please describe the garden and methods used.

Category 4: Academics

1. Does your school offer any environmental- and/or sustainability-related majors, such as environmental studies, ecology, or sustainable agriculture? If so, please list them all.

2. Does your school offer classes about clean technologies, including topics such as energy efficiency and solar-wind energy engineering? If so, please list them all.

3. Does your school provide students with a list of environmental and/or sustainability classes to make such courses easy to identify? Please provide a link, if available.

4. Please provide names of standout professors who work on environmental and/or sustainability issues and list their accomplishments, including awards, honors, and publications.

5. Do you have environment- and/or sustainability-related centers, programs, or research institutions associated with your school? If so, please provide their names and a description.

6. Is an environment-themed class a core curriculum requirement? If yes, please provide the name(s) of the course(s).

7. What percentage of academic departments offer environment- or sustainability-related classes?

_____ %

Category 5: Purchasing

1. Does your school have a sustainable-purchasing policy? If yes, briefly explain.

2. What percentage of paper used on campus is made from at least 30% postconsumer recycled content?

_____%

Does your school purchase paper that is Forest Stewardship Council-certified?

3. Does your school have a policy to purchase Electronic Product Environmental Assessment Tool (EPEAT)-certified (or similar) electronics? If yes, please describe.

4. Do you have packaging agreements with suppliers that minimize waste? If yes, please describe.

5. Does your school specify in its purchasing contracts that products with energy-saving features be installed or delivered with these features enabled?

Category 6: Transportation

1. Does your school provide a free shuttle service around campus and town? If yes, briefly explain.

2. What has your school done to promote bicycling as a transportation method?

3. Does your school encourage its students and employees to use public transit, carpool, or use some other form of alternative transportation? If yes, what are the incentives?

4. Approximately what percentage of students drive to school in a car?

_____ %

5. Approximately what percentage of faculty and staff drive to work in a car?

_____ %

Category 7: Waste Management

1. What is your campus's current waste-diversion rate (i.e., percentage of campus waste being diverted from landfills)?

_____ %

2. Does your campus provide recycling receptacles wherever there are trash cans?

3. Are recycling bins readily available at large events such as football games?

4. Does your school compost? If yes, are compost receptacles available at all or most on-campus dining locations?

5. Is your school committed to waste-reduction goals, such as zero waste? Please explain.

6. Does your campus administer a donation program for clothing and other used goods when students are moving out of student housing? If so, are bins located in every dormitory?

Category 8: Administration

1. Is environmental sustainability part of your institution's mission statement, guiding principles, or similar document? If so, please provide the text or link.

2. Does your school employ at least one person dedicated to overseeing campus environmental initiatives, such as a sustainability coordinator, or have a sustainability task force or committee? Is the coordinator position a part-time or full-time position?

3. Has your school made an official commitment to reducing its impact on climate change by setting goals of emission reductions by a certain date? If yes, does your school have a plan for achieving these reductions? If so, briefly explain the plan.

4. Has your school conducted a complete greenhouse-gas-emissions audit of its campus?

5. Has your school achieved a reduction in total annual carbon emissions? If yes, please explain and provide the benchmark year and percentage.

Category 10: Other Initiatives

1. Have any of your school's students effected positive environmental change on a campus, state, or national level? If so, please describe. (To nominate a specific student for greater attention in our coverage, please email cool.schools@sierraclub.org with his or her name, accomplishments, and contact information.)

2. Have students participated in environmental challenges or events such as the Solar Decathlon, environmental design contests, or environmental debates? If so, which events and how did they do?

3. Has your school set aside part of its campus as natural habitat, stipulated limited campus development, or enacted programs preserving its land? If so, please explain.

4. Does your school adhere to an indoor air-quality policy (e.g., the mandated use of nontoxic cleaning supplies)? If yes, describe the policy.

5. Does your school offer outdoor- or nature-based programs, classes, or extracurricular activities to students and/or faculty? If yes, please list and describe.

Category 10: Other Initiatives, continued

6. What specific actions has your school taken to improve its environmental sustainability since spring 2009? Please list all improvements.

7. Please use this space to address any other unique or interesting sustainability initiatives that have not been previously mentioned:

Appendix A

Category 1: Energy Supply

1. Please break down the energy types that your campus uses for electricity by percentage. If the school purchases its electricity from a utility company, this information should be available from that company.

70% of the electricity used by the campus is generated by UCLA's Cogeneration plant, in operation since 1994. The fuel for the plant is 100% natural gas, of which 7% is landfill gas. The remaining campus electricity is from the Los Angeles Department of Water and Power, which translates to an additional 9.6% of UCLA's electricity from natural gas (total 74.7%), 13.2% from coal 2.1% large hydropower, 2.7% nuclear, 2.4% renewables. The renewables portion of the mix will increase as UCLA will be purchasing through LADWP's "Green Power" program, where customers pay a small premium on their bill, and installing some solar as part of UCLA's Climate Action Plan.

Cogeneration is a cost effective and clean way to generate power. More than twice as efficient as traditional power generation. A typical power plant generates electricity by burning fuel, and the heat resulting from that process is wasted, but the cogeneration process captures the waste heat to make steam. In addition, UCLA added a central chilled water facility to harness the steam to produce chilled water. Seven percent of the fuel burned at the plant is landfill gas, piped underground from the local Mountain Gate landfill. The cogeneration plant also eliminated the campus use of CFCs (a chemical compound that damages the ozone layer) by 20,000 pounds, a 90 percent decrease, by retiring over 30 individual air-conditioning chillers. The plant also significantly reduces UCLA's emissions of air pollutants and greenhouse gases.

Appendix B

Category 2: Efficiency

2. What percentage of water used for campus landscaping is from recovered, reclaimed, or untreated sources?

UCLA does not meter landscaping water use separately and so we are unable to provide an exact answer to this question. However, UCLA does use recovered and reclaimed water. Condensate from air conditioning systems, seal water from vacuum pumps and other laboratory equipment, and water from other non-contaminated sources has been collected and used in campus cooling towers for many years, decreasing the amount of water imported into southern California. The recovered water program has recently been expanded to incorporate capturing the water being removed from under the foundation of the new Ronald Reagan Hospital. Because the hospital foundation extends into the ground water plume, the hospital requires constant dewatering. Rather than being lost to the storm drain system, this water is now recovered and also used in the campus cooling towers.

3. What percentage of campus lighting fixtures are energy-efficient (e.g., compact fluorescent, LED, or equipped with motion sensors, automatic daylight shutoff, or other energy-saving features)?

UCLA began a program in 1996 to replace standard fluorescent tubes with more energy efficient models. By shifting from the older T12 style to the T8 style, the energy consumption of each lamp was decreased by 20 percent. Over a period of several years, nearly 600,000 lamps were changed, thereby reducing energy demand by approximately 4.8 MW and reducing CO₂ emissions by approximately 9,500 metric tons annually. The campus is now proceeding with a second phase of lighting upgrades to replace the T8 lamps with newer versions that reduce the

lamp wattage usage by a further 12 percent with an anticipated emission reduction of approximately 5,867 metric tons of CO₂. In addition to reducing energy use through more efficient lighting UCLA has undertaken a major occupancy sensor installation project. This project is a campus-wide program to install occupancy sensors in offices, storerooms, conference rooms, bathrooms, and stairwells across campus. So far 9,697 sensors have been installed in 37 buildings. Upon completion in 2009 there will be 15 additional buildings included in the project. The sensors installed include infrared, ultrasonic, and dual-technology sensors. With an anticipated completion in 2009, the energy savings are estimated to be approximately 2,580 MWhrs per year, which would reduce campus annual CO₂ emissions associated with energy purchased from the LADWP by approximately 1,450 metric tons.

5. Does the institution have underway a program of energy-efficiency retrofitting projects, such as improving building insulation or sealing heating and cooling ducts?

UCLA'S Energy Conservation Project is a campus-wide project that encompasses 25 buildings, with an estimated annual energy savings for 31,000 MWHRS and estimated energy cost savings of \$4,200,000.

The Energy Conservation Project will reduce the energy usage in more than twenty five UCLA buildings by approximately 25%. The buildings selected for this program are typically more than thirty years old and were designed to provide highly reliable and effective ventilation systems but not to minimize energy usage. This program modifies the building management control systems and equipment to enable the ventilating systems to reduce air flows and hydronic flows while adjusting system operation to meet comfort and indoor air quality. Nine buildings will be completed by 2010, and final completion of the entire program is anticipated in 2012. The program is expected to reduce the annual campus greenhouse emissions by approximately seven percent (17,000 tons of CO₂), with an estimated annual energy savings of 31,000 MWHRS.. It will also reduce the campus peak demand for chilled water by close to 2,000 tons.

The work necessary to accomplish this program varies by building but generally includes converting air flow systems to variable flow responsive to outdoor air conditions, occupancy levels and building schedules. Hydronic systems including chilled water and hot water heating are also converted to variable volume flows with temperatures adjusted to outdoor air conditions. Control systems are digitized and control equipment renovated and brought to current standards.

Appendix D

Category 5: Transportation

2. What has your school done to promote bicycling as a transportation method?

In addition, UCLA Transportation is working with students through the Action Research Team Program (explained in Category 10 Question 7) and through the UCLA Bicycle Coalition to advocate for improvements in bicycle infrastructure en route to campus. Administration and students have spoken to City Council and State representatives and provided comment on the Los Angeles Bicycle Master Plan. The Action Research Team is providing data collection assistance aiding UCLA in analyzing the utilization of existing infrastructure and assessing additional cyclist needs. They have also provided recommendations and content to enhance information available to support cycling online. They are working on producing videos to help educate the UCLA community about cycling.

Appendix E

Category 4: Academics

1. Does your school offer any environmental- and/or sustainability-related majors, such as environmental studies, ecology, or sustainable agriculture? If so, please list them all.

Yes. As an institution of higher education, UCLA recognizes its obligation to prepare students to be global citizens who understand and practice living sustainably in addition to supporting and promoting environmentally responsible operations. In order to prepare students and the campus community for these roles, UCLA offers a growing range of climate and sustainability-related educational experiences. These educational experiences can be found not only in courses and degree programs, but also in residential life programs, staff and faculty workshops, resource centers, student groups and peer-to-peer educational programs. UCLA is committed to expanding these efforts in order to foster learning on climate and sustainability issues.

Existing Courses and Academic Programs

This includes courses such as the Global Environment Freshman Cluster, a 3-course sequence that annually teaches over 170 first year students about ecology, water quantity and quality, air quality, climate change, energy, policy, and regulation in one integrated program.

UCLA has many academic programs dedicated to climate change and sustainability education at both the undergraduate and graduate levels. In addition to the specific programs mentioned here, there are many additional disciplinary major or minor programs offered by departments that address issues related to climate change and sustainability such as those in Earth and Space Sciences, Ecology and Evolutionary Biology, Geography, Civil and Environmental Engineering, and Political Science, just to name a few.

Atmospheric, Oceanic, and Environmental Sciences Major: The Department of Atmospheric and Oceanic Sciences (AOS) offers this B.S. degree program which is designed to be a very flexible program leading to a wide variety of career options, including graduate study in atmospheric and oceanic sciences.

Interdepartmental Program in Mathematics and Atmospheric & Oceanic Sciences: This undergraduate interdepartmental program combines courses from the Mathematics and AOS departments. This program is designed to provide rigorous mathematical training with a comprehensive background in topics relevant to atmospheric, oceanic and environmental sciences. The program is intended to provide particularly good preparation for graduate studies in a streamlined course of study.

Atmospheric and Oceanic Sciences Minor: The minor program offered through AOS provides a formal vehicle for students specializing in other science fields to pursue interests in the atmospheric and oceanic environment. It is designed to be flexible, recognizing that many topics in this field cross traditional disciplinary boundaries.

Environmental Science Major: The Institute of the Environment (IoE), together with the Departments of Atmospheric and Oceanic Sciences, Civil and Environmental Engineering, Earth and Space Sciences, Ecology and Evolutionary Biology, Environmental Health Sciences and Geography, offer an undergraduate major in Environmental Science. This B.S. degree program offers both disciplinary breadth and depth and includes a solid foundation of natural sciences and upper division coursework in nine different departments that focus on understanding environmental issues across earth, atmospheric, life, and social sciences. In addition, students

must complete a disciplinary minor which provides in-depth knowledge in one of eight environmental science areas, each associated with a particular UCLA department.

Earth and Environmental Science Major: The B.A. degree program in the Department of Earth and Environmental Science is intended to provide a broad background in Earth sciences that is especially appropriate for students intending to become K through 12 teachers in Earth, physical, or life sciences. It may also be of interest to students who plan careers in environmental sciences, law, government, business, journalism, public health, medicine, or dentistry.

Environmental Systems and Society Minor: This IoE minor is designed for undergraduate students who wish to augment their major program of study with courses addressing the relationships between environmental science and associated social and political issues. The minor seeks to impart a deeper understanding of environmental systems related to air, land, water and biological resources. A main goal of the program is to provide students with a foundation for sound decision making as a professional and a citizen.

Conservation Biology Minor: The Conservation Biology minor in the Department of Ecology and Evolutionary Biology is designed to augment a student's major program of study with courses addressing issues central to the conservation and sustainability of biodiversity and natural ecosystem processes. The minor seeks to provide students with a greater depth of experience and understanding of the role that science can play in developing conservation policy.

Geography/Environmental Studies Major and Minor: Intended to develop and deepen a student's understanding of environmental issues, the Geography/ Environmental Studies degree program emphasizes a systems approach to gaining an understanding of major environmental problems facing our society and the world at large. Students gain an understanding of geographical perspectives of human impacts on natural systems, and on the implications of environmental change on local, regional and global human systems.

The Education for Sustainable Living Program (ESLP): ESLP provides education in sustainability to undergraduate students through a student-organized lecture series and on-campus action research. The Action Research Teams are small groups of undergraduate students who work closely with UCLA faculty, staff and administrators to address questions about sustainability on campus.

Graduate and Professional Programs

Leaders in Sustainability Certificate Program: The IoE together with the UCLA Anderson School of Business offer graduate level sustainability education through the Leaders in Sustainability Certificate Program. This program, beginning its second year, enables graduate students from any area on campus to reach out beyond their departmental studies to incorporate interdisciplinary sustainability courses and sustainability-focused community research into their graduate education.

Atmospheric and Oceanic Sciences: Climate and Weather: The AOS department offers a research area in Climate and Weather as part of the M.S. and Ph.D. programs. The program addresses the challenge of a wide variety of problems of compelling scientific interest and increasing social relevance including climate change, greenhouse warming, air pollution, and the ozone layer.

Environmental Science and Engineering Program (ES&E): The ES&E program is a professional doctorate program that provides students the scientific, engineering, and policy skills to translate their research into effective environmental action. The ES&E program uses an interdisciplinary approach to develop leaders in environmental science and policy.

Environmental Health Sciences: The EHS department, in the School of Public Health offers M.P.H., M.S. and Ph.D. and Dr. P.H. degree programs that explore the relationship between

human health and the environment. The program addresses health issues in the workplace and the exposure of ordinary citizens to environmental agents as they move through the many microenvironments of everyday life.

Public Policy – Environmental and Natural Resource Policy: The Department of Public Policy offers a specialization in Environmental and Resource Policy as part of the Masters in Public Policy professional degree program. Students gain knowledge critical for writing laws and regulations, creating new domestic or international institutions, supervising environmental organizations, and operating environmental protection programs and resource management efforts.

Urban Planning – Environmental Analysis and Policy: The Department of Urban Planning offers a specialization in Environmental Analysis and Policy as part of the Masters of Arts in Urban Planning program. The program is concerned with broader questions of environmental policy and the role of environmental issues in the overall planning process in both domestic and international settings.

Wells Environmental Law Clinic: The Clinic offers excellent opportunities for law students to obtain hands-on experience in environmental law. Working with many nonprofit and government agency partners, the clinic has been very successful at training environmental lawyers while helping to protect the environment. Students who take the six-unit environmental law clinical course work on large and small cases, involving both federal and state law.

Appendix F

Category 4: Academics

4. Please provide names of standout professors who work on environmental and/or sustainability issues and list their accomplishments, including awards, honors, and publications.

Richard F. Ambrose - Professor, Department of Environmental Health Sciences

Ann E. Carlson - Professor of Law, School of Law

Albert Carnesale - Professor, Public Policy, Chancellor Emeritus; American Academy of Arts and Sciences

Yoram Cohen - Professor, Department of Chemical & Biomolecular Engineering; Lawrence K. Cecil Award in Environmental Chemical Engineering, Del Amo Research Fellowship, National Research Council (Board on Environmental Studies and Toxicology)

Charles Corbett - Professor, Anderson School of Management

Randall Crane - Professor, Department of Urban Planning

JR DeShazo - Professor, Department of Public Policy

Jared Diamond - Professor, Geography; MacArthur Foundation Fellows, National Medal of Sciences, Pulitzer, American Academy of Arts and Sciences, National Academy of Sciences

Bruce Dunn - Professor, Department of Material Science and Engineering;

Deborah Estrin - Professor, Computer Science; National Academy of Engineering, American Association for the Advancement of Science, American Academy of Arts and Sciences

John Froines - Professor, Department of Environmental Health Sciences

Rajit Gadh - Professor, Department of Mechanical and Aerospace Engineering; NSF CAREER award, Research Initiation Award, Lucent Industry Ecology Award, Engineering Education Foundation Research Initiation Award

Hilary Godwin - Professor, Department of Environmental Health Sciences

Malcolm S. Gordon - Professor, Department of Ecology and Evolutionary Biology; American Association for the Advancement of Science

Alex Hall - Associate Professor, Department of Atmospheric and Oceanic Sciences; NSF Fellowship, NASA Earth System Science Fellowship, the Lamont Fellowship, NSF CAREER award

Cara Horowitz - Professor, Law faculty, Andrew Sabin Family Foundation Executive Director, Emmett Center on Climate Change and the Environment

Steve Hubbell - Professor, Department of Ecology and Evolutionary Biology; American Association for the Advancement of Science

Diana Huffaker - Professor, Department of Electrical Engineering; IEEE Fellow, National Security Science and Engineering Faculty Fellow (Department of Defense)

Matthew Kahn - Professor, Institute of the Environment, Department of Public Policy, Department of Economics

James Liao - Professor, Department of Chemical and Biomolecular Engineering; Charles Thom Award, Society for Industrial Microbiology, Marvin J. Johnson Award, Biochemical Technology Division, American Chemical Society, James E. Bailey Award, Society for Biological Engineering, 2009

Glen M. MacDonald - Professor, Department of Geography; Guggenheim Fellowship, American Academy of Arts and Sciences

Carl Maida - Adjunct Professor, Institute of the Environment, American Association for the Advancement of Science

Vasilios Manousiouthakis - Department of Chemical Engineering; Northrop Award for Outstanding Research

James C. McWilliams - Professor, Department of Atmospheric and Oceanic Sciences; National Academy of Sciences

Mary Nichols - Professor, Institute of the Environment, School of Law

Larry Smith - Professor, Department of Geography; Guggenheim Fellowship

Thomas B. Smith - Acting Director and Professor, Institute of the Environment, Department of Ecology and Evolutionary Biology

Victoria L. Sork - Professor, Institute of the Environment, Department of Ecology and Evolutionary Biology

Michael K. Stenstrom - Professor, Department of Civil and Environmental Engineering

Keith D. Stolzenbach - Professor, Department of Civil and Environmental Engineering

Irwin Suffet - Professor, Department of Environmental Health Sciences, Environmental Science and Engineering Program

Richard P. Turco - Professor, Institute of the Environment, Department of Atmospheric and Oceanic Sciences; Mac Arthur Foundation Fellows

Arthur Winer - Professor, Department of Environmental Health Sciences, Environmental Science and Engineering Program

Richard Wirz - Professor, Department of Mechanical and Aerospace; Sigma Gamma Tau (Aerospace Honor Society), Senior Member of American Institute of Aeronautics and Astronautics

Cheryl Ann Zimmer - Professor, Department of Ecology and Evolutionary Biology; American Association for the Advancement of Science

(partial list)

Appendix G

Category 4: Academics

5. Do you have environment- and/or sustainability-related centers, programs, or research institutions associated with your school? If so, please provide their names and a description.

Yes. UCLA has many relevant research centers, listed below, by the following categories- Natural and Physical Sciences, Technology, Policy and Law, and Human Health and Environmental

Justice.

Natural and Physical Sciences

Air Quality and Aerosol Technology Laboratory: This laboratory facilitates the study of the dynamics of aerosol flow reactors. It is well equipped for the study of particle/gas systems with applications to pollution control and commercial production of fine particles. Instrumentation available includes optical particle counters, electrical aerosol analyzers, and condensation nuclei counters.

Host Unit : Department of Chemical Engineering
www.chemeng.ucla.edu/reschlabs.html

Center for Earth Systems Research (CESR): CESR conducts research in the physics and biogeochemistry of the Earth's atmosphere, cryosphere, and oceans. In addition, CESR is a base for a broad, cooperative effort to develop, test, and apply comprehensive numerical modeling capabilities for the Earth's climate-for periods extending over previous millennia, the present, and the coming centuries of anthropogenically induced changes.

Host Unit: Department of Atmospheric and Oceanic Sciences
www.atmos.ucla.edu/cesr/

Center for Tropical Research (CTR): The unifying goal of the senior scientists, postdoctoral researchers, and graduate students at the CTR is to understand the biotic processes that underlie and maintain the diversity of life in the tropics and to advance conservation efforts that protect endangered species and habitats. Core research investigates the impacts of human activities, including climate change, on biodiversity and conservation efforts.

Host Unit: Institute of the Environment
www.ioe.ucla.edu/CTR/

Environmental Engineering Analytical Chemistry Laboratory (EEACL): EEACL has been established to provide for identification and quantification of organic and inorganic compounds at trace levels in environmental, biochemical and geochemical samples from atmospheric, aquatic and solid media.

Host Unit: Department of Civil and Environmental Engineering
www.cee.ucla.edu/eeacl.htm

Joint Institute for Regional Earth System Science and Engineering (JIFRESSE): JIFRESSE is a scientific collaboration between UCLA and NASA's Jet Propulsion Laboratory (JPL) to improve understanding of global climate change and to develop future projections about its effect on regional climates and environments. The Institute serves as a center for multi-disciplinary research focused on the Southern California region including studies of the atmosphere; coastal ocean and land surface; and the physical, chemical and biological interactions among them.
www.jifresse.ucla.edu/default.htm

UCLA Stunt Ranch Reserve: The reserve is a preserved natural chaparral habitat (naturally burned in 1995) used for research and education. While researchers track the re-growth of vegetation on the charred slopes, facilities reconstruction and University-community outreach are top priorities of the reserve's project and faculty managers.

Host Unit: UC Natural Reserve System (UCLA administration)
<http://stuntranch.ucnrs.org>

Technology

Center for Energy Science and Technology Advanced Research (CESTAR): CESTAR is an interdepartmental research center whose mission is to provide a common focal point for collaboration and synergism among researchers at UCLA involved in energy related research. Currently CESTAR is organized around four specific energy thrust areas: Fusion Energy, Hydrogen, Materials for Energy Applications, Energy Conversion, and Energy Conservation

Host Unit: School of Engineering and Applied Sciences

<http://cestar.seas.ucla.edu/>

Center for Embedded Networked Sensing (CENS): CENS is a major research enterprise focused on developing wireless sensing systems and applying this revolutionary technology to critical scientific and societal pursuits including: development of new measurement tools to identify the sources and fates of chemical and biological pollutants in natural, urban, and agricultural waters as well as using cell phones for applications in areas of public health, environmental protection, urban planning, and cultural expression. One tool CENS has developed, PEIR or Personal Environmental Impact Report, helps people measure their individual environmental footprint and exposure to pollutants.

Host Unit: Computer Science Department
www.research.cens.ucla.edu

Energy Design Tools - Home Energy Efficient Design (HEED): Researchers in the Department of Architecture and Urban Design have developed a suite of free easy-to-use energy design software programs including HEED which shows home owners, builders, and architects how much energy and money they can save by making various design or remodeling changes. Users can easily draw in the floorplan of their house and can select from lists of standard wall and roof construction and different types of windows. The latest version adds new features including allowing changes to electric and gas utility rates plus rates for oil and propane, offering various kinds of operable window shading, allowing thermal mass to be added or removed, and the home's calculates carbon footprint. Climate data is available for over one thousand locations around the world. This climate data can be graphically analyzed using another tool called Climate Consultant.

Host Unit: Department of Architecture and Urban Design
<http://www2.aud.ucla.edu/energy-design-tools/>

Water Technology Research (WaTeR) Center: The mission of the WaTeR Center is to advance technologies of water production in order to develop new and economical alternative sources of potable, irrigation, and consumptive water uses.

Host Unit: School of Engineering and Applied Sciences
www.desalination.ucla.edu/

Policy & Law

Center for Climate Change Solutions: The Center for Climate Change Solutions operates at the intersection of science and policy by engaging researchers and decision-makers in the development and communication of effective solutions to the consequences of climate change.

Host Unit: Institute of the Environment
www.ioe.ucla.edu/cccs/

Emmett Center on Climate Change and the Environment: The Emmett Center is the nation's first law school center focused exclusively on climate change. Its mission is studying and advancing law and policy solutions to the climate change crisis and training the next generation of leaders in creating these solutions. It focuses on issues relating to both mitigation (reducing greenhouse gas concentrations in the atmosphere) and adaptation (coping with whatever climate change is inevitable despite our best mitigation efforts), working across disciplines to promote research and tools useful to decision-makers locally, statewide, nationally and beyond.

Host Unit: School of Law
www.law.ucla.edu/home/index.asp?page=2390

California Center for Population Research (CCPR): CCPR is a cooperative of UCLA faculty who carry out basic and applied research and training in demography. CCPR comprises over 60 active faculty researchers from the disciplines of anthropology, economics, epidemiology, geography, human resources & organizational behavior, law, medicine (pediatrics and psychiatry), population, psychology, community health services, public policy, social welfare, sociology, and urban planning.

Host Unit: School of Public Affairs
www.ccpr.ucla.edu/asp/index.asp

Center for Corporate Environmental Performance: The Center for Corporate Environmental Performance coordinates research and teaching on the environmental impact of corporations and market responses to green strategies. The center partners with corporations to improve their environmental performance while remaining competitive.

Host Unit: Institute of the Environment
www.ioe.ucla.edu/ccep/

Institute of Transportation Studies: Each year dozens of ITS faculty, students, and research staff collaborate on a wide array of transportation policy and planning studies, ranging from an analysis of the travel trends and transportation needs of immigrants and low-income workers, to the testing and evaluation of innovative fare programs to increase public transit use.

Host Unit: School of Public Affairs
www.its.ucla.edu

Lewis Center for Regional Policy Studies: This center promotes the study, understanding and solution of regional policy issues, with special reference to Southern California, including problems of the environment, urban design, housing, community and neighborhood dynamics, transportation and economic development.

Host Unit: School of Public Affairs
<http://lewis.spa.ucla.edu/index5.cfm>

The Sustainable Technology Policy Program: This is an interdisciplinary project of UCLA School of Law and the UCLA School of Public Health. The program has received a research grant from the Robert Wood Johnson Foundation's Public Health Law Research Program to study safer alternatives to the use of lead in industrial and consumer products and processes. The grant, in the amount of \$400,000, will fund the 2 ½ year study "Deploying Safer Alternatives through Public Health Law." UCLA School of Law Professor Timothy Malloy and Dr. Peter Sinsheimer, of the UCLA School of Public Health, will lead the study. Dr. John Froines and Dr. Hilary Godwin of the School of Public Health are also participating in the study.

La Kretz Center for California Conservation Science: This center promotes cross-disciplinary scientific research and educational activities that inform and support environmental management and public education with the goal of preserving California's exceptional biodiversity and unique ecosystems and provides a model of university and inter-agency cooperation for meeting the conservation and management challenges of the world's growing urban-wildland interface.

The La Kretz Center will conduct research, teaching programs and public outreach in partnership with the National Parks, State Parks and the Mountains Recreation and Conservation Authority. It will offer public workshops, lectures and conferences to share conservation lessons learned. The center will emphasize conservation science issues affecting the Santa Monica Mountains and the adjacent region, including the Los Angeles River Basin and Malibu.

<http://www.environment.ucla.edu/lakretz/>

Ralph and Goldy Lewis Center for Regional Policy Studies: This center was established to promote the study, understanding and solution of regional policy issues, with special reference to Southern California, including problems of the environment, urban design, housing, community and neighborhood dynamics, transportation and economic development. It is a focus of interdisciplinary activities, involving numerous faculty members and graduate students from many schools and departments at UCLA. It also fosters links with researchers at other California universities and research institutes on issues of relevance to regional policy.

<http://www.lewis.ucla.edu/index.cfm>

Luskin Center for Innovation: The Luskin Center for Innovation connects UCLA's brightest minds with forward-looking policymakers to tackle society's greatest challenges. It targets problems of national and global significance that have a substantial impact on Los Angeles. For at least the next two years the Luskin Center will focus on making Los Angeles and California more environmentally sustainable through improved policymaking. Over this period the Center will target standard areas of environmental policy (pollution reduction and natural resource management) as well as polices focused upon clean/green technology, climate change, emerging opportunities in environmental engineering and nanotechnology, renewable energy, environmental aspects of transportation, and others.
<http://www.publicaffairs.ucla.edu/content/luskin-center-innovation>

Human Health and Environmental Justice

Center for Healthier Children, Families & Communities: The Center has created a unique partnership of University faculty, students, and researchers; service providers; community organizations; local residents; businesses; and government agencies to: develop innovative and responsive health and social services programs, transform communities into healthier environments for children, and educate the next generation of leaders for careers in community service.

Host Unit: David Geffen School of Medicine, Department of Pediatrics, and School of Public Health
www.healthychild.ucla.edu

Center for the Study of Urban Poverty (CSUP): CSUP's primary mission is to encourage and facilitate academic research into the causes and consequences of urban poverty and the effectiveness of policies aimed at alleviating poverty.

Host Unit: Public Affairs
www.sscnet.ucla.edu/issr/csup/index.php

Center for Occupational and Environmental Health (COEH): COEH-affiliated centers and programs seek to expand our knowledge base, provide exceptional training of students to address toxic chemical exposure, global warming, population growth, habitat destruction, and social/psychosocial factors, and to interact with Southern California communities as an interface between the University and the public.

Host Unit: Environmental Health Science
www.coeh.ucla.edu

Urban Center for People and the Environment: The research focus of the Urban Center for People and the Environment is integrated social-biophysical research on human environmental interactions and their impacts and feedback loops, social justice and urban environmental sustainability through revitalizing and re-naturalizing the urban environment and research and analysis of systems of governance and government for democratic accountability and greater sustainability.

Host Unit: Institute of the Environment
www.ioe.ucla.edu/UCPE

Appendix H

Category 8: Administration

- 1. Is environmental sustainability part of your institution's mission statement, guiding principles, or similar document? If so, please provide the text or link.**

According to the 2009-2010 Capital Financial Plan, UCLA utilizes a variety of methods to ensure that the issue of environmental sustainability is addressed. The UC Sustainability Policy addresses sustainability and green buildings on the UC campuses. The Policy sets aggressive goals for the ten UC campuses to continue to reduce their carbon footprints. These goals represent a challenge for UCLA as the campus expands and demand for energy increases (through growth in the use of technology). Incorporating energy efficiency into new buildings and renovations as part of the Green Building Program has allowed UCLA to continue to reduce the amount of energy used on a square-foot basis, despite overall campus growth. All UCLA projects are designed to comply with the requirements of the Policy. The Policy adopts green building standards using the Leadership in Energy and Environmental Design (LEED) rating system and includes stringent energy conservation measures. UCLA is committed to achieving a minimum LEED Silver certification for all new construction and major renovation projects.

Furthermore, in the Capital Financial Plan, "Build A Sustainable Campus" is one of three major Capital Strategic Initiatives. The plan details green building, transportation, energy conservation and other sustainability programs and goals. One of the other strategic initiatives- "Transform UCLA Into A Residential Academic Community" is also related to sustainability, as increasing the amount of students and staff living on campus decreases commutes and builds community.

UCLA's Strategic Plan clearly addresses pertinent environmental issues and provides a framework to guide UCLA to implement environmentally friendly building technologies and energy efficient design strategies. Additionally, the University will benefit economically in the long run from using energy efficient equipment and designs as well as utilizing renewable energy systems. The University's efforts to transform UCLA into a "Residential Academic Community" address the social dimension of sustainability, and the importance of community awareness and involvement in our working towards a sustainable future.

<http://www.universityofcalifornia.edu/regents/regmeet/jul09/gb3attach.pdf>
2009-2010 Capital Financial Plan, <http://www.sustain.ucla.edu/cap/article.asp?parentid=2052>

Additionally, UCLA's Long Range Development Plan is the campus's Master Plan. Energy, water, and materials efficiency is incorporated into all plans for construction and renovation of campus buildings. UCLA includes methods to create and maintain buildings and systems to provide for a sustainable environment. Water conservation programs have been instituted to reduce water demand, and recycling programs to minimize waste with an increasing population. Emphasis on efficient use of water, energy, recycling, and reuse will promote sustainability on campus. The UCLA campus will incorporate technological advances and planning principles into future campus development and renovation to reinforce environmental sustainability. The master plan is accompanied by an Environmental Impact Report (EIR) detailing the environmental effects of the entire plan. Compliance with the California Environmental Quality Act (CEQA) and environmental analysis for each product is a requirement for all project proposals.

Master plan: http://www.capital.ucla.edu/EIR/Final_UCLA_2002_LRDP.pdf
Amendment: http://www.capital.ucla.edu/EIR/2002_LRDP_Amendment_Amendment_1_to_2002LRDP.pdf

Appendix I

Category 10: Other Initiatives

2. Have students participated in environmental challenges or events such as the Solar Decathlon, environmental design contests, or environmental debates? If so, which events and how did they do?

In November 2009, 3 students at the Henry Samueli School of Engineering and Applied Science were selected to receive \$2,500 Live EDGE scholarships to help further their educations in electrical and electronics engineering. Of the 12 Live EDGE scholarships awarded to engineering students worldwide, UCLA had the most winners.

The UCLA students: Abde Ali Kagalwalla and Meng Ai, who are both first-year graduate students in electrical engineering, and Armin Axel Brugger, a junior majoring in electrical engineering, were each presented with \$2,500 checks on November 3, by John Curran, Design Segment Manager and Mike Jeworski, General Sales Manager of Newark, a leading electronics distributor in North America.

To qualify for the scholarships, entrants were asked to explain the importance of their engineering degree in society, how they saw electronics design changing and what new technologies would have the biggest impact on electronics in the near future. Winning entries are posted at element14 within the Live EDGE Group at <http://www.element14.com/community/community/liveedge>.

In February 2010, UCLA's Center for International Business Education and Research sponsored Adam Green, Dave Castle, Pok Hoo, Hiromasa Ebihara, and Andrew Hunt for winning the 2010 Renewable Energy Case Competition (IRECC) held at the University of Michigan Ross School. The UCLA Anderson team went up against teams from Harvard Business School, Northwestern's Kellogg School, and Cornell's Johnson School.

A business case competition focused on finding renewable technologies that are immediately applicable in emerging markets, the IRECC is organized centrally by Investors Beyond Borders. The purpose of the competition is to provide students opportunities to gain diverse experience in creating a proposal for an international business venture in an emerging country. Students are challenged to apply creative, analytical and teamwork abilities on an international stage.

The UCLA Super Mileage Vehicle (SMV) Team is a group of mechanical, aerospace, electrical and computer engineering students competing in the annual Society of Automotive Engineers (SAE) Supermileage Competition. In 2009 at the Shell Eco Marathon, the Indy 500 of super mileage racing, UCLA's team was awarded a special "Eco-Design Award" for their Prototype design. Their special design not only contributed to the fuel efficiency of their vehicle, but incorporated recycled and eco-friendly materials into the vehicle and production process.

Additionally UCLA has hosted energy conservation competitions in the residence halls to encourage student behavioral change. This year over 1500 students participated.

Appendix J

Category 10: Other Initiatives

3. Has your school set aside part of its campus as natural habitat, stipulated limited campus development, or enacted programs preserving its land? If so, please explain.

The Mildred E. Mathias Botanical Garden, Franklin D. Murphy Sculpture Garden, Dickson Plaza, Janss Steps, Stone Canyon Creek area, Meyerhoff Park, Wilson Plaza, Bruin Plaza, and the University Residence shall be maintained as open space preserves during the Long Range Development Plan Amendment planning horizon.

UCLA is undergoing Stone Creek Restoration. When the construction of the Westwood campus of UCLA began in 1927, Stone Canyon Creek carved a deep meandering ravine across the western edge of campus. The creek featured native riparian habitat with sycamore, oak and willow trees that supported abundant wildlife including a colony of acorn woodpeckers. Within a few years, most of the ravine had been filled in and by the 1940's, much of the creek was channeled into underground pipes and the habitat was lost. Santa Monica Baykeeper, a local non-profit organization with expertise in habitat restoration and community action, has teamed up with the UCLA Institute of the Environment and UCLA Facilities Management to restore a section of the remaining creek.

Beyond the substantial ecological benefits of restoring a native ecosystem, this project represents an incredible educational opportunity to engage people of all ages on campus and in the community: toddlers and pre-schoolers from the on-campus daycare center take field trips here; an adjacent section of the creek runs through the University Elementary School where a second restoration effort is being considered; students at the Environmental Charter High School in Lawndale are growing native plants in their nursery and they will come this spring to help plant them and experience a bit of campus life; the area is used for hands-on learning by students in biology, ecology, environmental science, engineering, geography, and landscape design courses, just to name a few.

Appendix K

Category 5: Other Initiatives

5. Does your school offer outdoor- or nature-based programs, classes, or extracurricular activities to students and/or faculty? If yes, please list and describe.

Yes. UCLA's Recreation Center has an *Outdoor Adventures program*, which plans trips for students, staff, and faculty. These trips provide wilderness education that is experiential and adventurous and promotes responsible stewardship of the environment and our natural resources. Groups also have the option of scheduling a specific group trip with Outdoor Adventures to tailor to their requests. Outdoor Adventures has planned custom group trips to many locations in California and out of state locations such as Hawaii.

Outdoor Adventures programs include group gear. Attendees provide personal gear (sleeping bag, backpack, boots, food, etc). OA rents sleeping bags, backpacks, and ground pads (as well as other useful outdoor gear) from the Rental Center in the John Wooden Center. Information on renting equipment is provided at the pre-trip meeting. Group travel and dinners are provided for some outings as indicated. Trips are offered at least every weekend.

Outdoor Adventures trips include but are not limited to the following:

- Camping trips at state parks such as Leo Carillo State Beach and Yosemite National Park
- Rock climbing at Joshua Tree
- Whitewater rafting the Kern River
- Full moon night hiking,
- Backpacking in Death Valley
- Summit attempt of Mount Whitney

Through the Recreation Center, students and staff can also sign up for a gardening class taught by a Common Ground Master Gardner, with special guest speakers. This hands-on class is designed for those who wish to learn the basics of how to grow their own fresh fruits, vegetables and herbs in their own backyard gardens, container gardens or at the new community garden at UCLA. Attendees will learn the basics of seasonal planting, cultivating, harvesting, healthy soil, composting, natural weed and pest management, simple recipes, herb propagation as well as how to make your own teas and infusions. The class provides seeds and seedlings to help participants get started.

UCLA's Department of Ecology and Evolutionary Biology also offers field courses for advanced undergraduate students:

Field Biology Quarter (FBQ): During FBQ our students spend a full quarter conducting field research. Courses are taught both locally, in the deserts, mountains and coastal areas of California, and internationally, including the savannas of Africa, rainforests of Ecuador, and coral reefs of Australia. International courses are especially transformative for students, many of whom have never been immersed in a foreign culture, or exposed to the tremendous diversity of a tropical rainforest. The experiences these students carry away from these courses profoundly affect how they view the world, its people, and its fragile biota. Our professors strive to create an atmosphere in which students can learn to collaborate, help each other negotiate the challenges of research, and share in each other's successes. Small classes of 15 or less allow for very personalized attention. FBQ has been an essential part of our student's education since the 1970's. The Department of Ecology and Evolutionary Biology subsidizes the course as much as possible so that students pay only a fraction of the costs.

Marine Biology Quarter (MBQ): This class is a field program designed to give advanced undergraduates an opportunity to gain intimate and first hand knowledge of marine communities, their constituents and their structure. Previous sites include Hawaii, Catalina Island, Moorea (Tahiti), and the Bodega Marine Laboratory.

Moreover, UCLA offers travel-study programs to students to study sustainability in other countries:

Sustainable Community Development: Offered by the UCLA African Studies Center and the Institute of the Environment, this eight-week research and training program is focused on sustainable community development in Senegal, West Africa. The program will build on existing projects developed by the Earth Rights Eco-Village Institute (EREVI) based in Dakar, with affiliates around the world. Students will commit to a rigorous program combining academic coursework and language training with fieldwork in selected Senegalese eco-villages. Appropriate for students working in international development studies, African studies,

environmental science, global studies, public policy, public health, or others in the social and human sciences committed to a greener and more equitable future.

Sustainable Ecosystems: This course is a community-based international service learning program in multicultural Thai Buddhist, Muslim, and Sea-Gypsy [Moken] coastal communities. This program emphasizes project-based, collaborative, community engagement, and integrates social and natural science field research methods and techniques. You'll engage in sustainability fieldwork, intercultural activities, and community service. The academic portion of the program focuses on social, ecological, and environmental engineering theories, fieldwork, analysis, and practice. In the community service activities, we participate, collaboratively, with Thai villagers and organizations in developing sustainable community practices, restoring tsunami-damaged ecosystems, regenerating coastal biodiversity, and building resilience to climate change.

UCLA has also developed new General Education course open to entire campus:

Sustainability and the Environment (Environment 12): This class is an introduction to sustainability with emphasis on environmental component, including Earth's physical, chemical, and biological processes as related to resource demands and management. Examination of application of scientific method in helping to understand and solve sustainability problems. Case studies illustrating how natural and social scientists work on environmental sustainability issues. Focus on global climate change, biodiversity, pollution, and water and energy resources presented in context of creating sustainable human society that is environmentally sound, economically viable, and socially just and equitable.

Appendix L

Category 10: Other Initiatives

6. What specific actions has your school taken to improve its environmental sustainability since spring 2009? Please list all improvements.

Professor Diana Huffaker worked with about 20 other professors to win support for it: \$3 million in stimulus funding via a highly competitive grant from the National Science Foundation's (NSF) Integrative Graduate Education Research Traineeship (IGERT) award. The Clean Energy for Green Industry Fellowship, designed to develop leaders in environmental energy, will grant Ph.D. students a \$33,000 stipend for pursuing coursework in the science, business and policies of clean technology. The fellowship will be the only program in Los Angeles to teach the science and business of clean technology with a goal of boosting the clean-tech economy and creating green-collar jobs.

UCLA also offers an intensive one-week program to provide executive education in environment and sustainability. Offered by the Institute of the Environment, the program is entitled "Sustainability and Corporate Leadership: Informed Green Strategies for Your Firm." It is designed for professionals who are leaders in their organizations and seek to understand the long-term value of incorporating sustainability and green innovations into their strategy, products, operations and brand management.

Additionally, UCLA Extension now offers a Certificate in Global Sustainability. This 36-unit program has been designed for those interested in exploring the dynamic field of environmental sustainability, those needing to stay up to date in their current position or for individuals who want knowledge and skills to be better global citizens. Encompassing the fields of architecture, design, business, education, landscape architecture, law, marketing, public policy, real estate, science,

technology and urban planning, this program will focus on major elements that impact the environment on a daily basis such as our use of water, air, land, energy and transportation. -

As a campus, UCLA has been conducting a comprehensive campus sustainability assessment based on the Sustainability Tracking, Assessment, and Rating System (STARS). STARS is a system developed by the Association for the Advancement of Sustainability in Higher Education (AASHE)'s formal classification system for standardized campus sustainability progress.

Appendix M

Category 10: Other Initiatives

7. Please use this space to address any other unique or interesting sustainability initiatives that have not been previously mentioned:

(continued from earlier in application)

Corporate Partner's Program

UCLA's Institute of the Environment (IoE) has established a new model for collaboration and communication on environment and sustainability issues – fostering interactive relationships between companies and UCLA faculty, researchers, students and other firms to explore the latest business opportunities in environment and sustainability, corporate environmental performance, successful eco-marketing strategy and promotion of companies' environmental initiatives.

Developed by the IoE's **Center for Corporate Environmental Performance** with input from a number of globally recognized leaders in "green business," including several companies ranked in the highly competitive Dow Jones Sustainability World Index, the *Corporate Partners Program* draws upon the philosophy that the development and communication of effective environmental practices and products is both good corporate citizenship and good business.

"As one of the nation's largest energy companies, Southern California Edison is critically aware that energy use and conservation go hand in hand. We benefit from academic research in environmental protection and sustainability, and the students it educates, which, in turn, strengthens us and our ability to serve our customers. We are pleased to be among the first Corporate Partners to UCLA's Institute of the Environment. Together SCE and UCLA will provide leadership on many key environmental initiatives that will preserve and enhance our communities and our world for future generations." –Rick Greenwood, Ph.D., Director, Environment, Health & Safety, Southern California Edison

Laboratory Energy Efficiency Program (LEEP)

UCLA's Office of Environment, Health and Safety (EH&S) formed a Laboratory Energy Efficiency Program (LEEP) to promote energy efficiency in campus laboratories. LEEP informs laboratory researchers about ways to reduce energy consumption without compromising research needs. As described in UCLA's Climate Action Plan, the program is an important instrument for campus behavioral change as a means of reducing energy use and green house gas emissions. LEEP promotes energy conservation in labs through a pilot test of room-temperature storage of nucleic acids and a green labs audit program.

A main focus of LEEP is to reduce energy use by encouraging minimized fume hood sash heights. To encourage UCLA researchers in reducing sash heights, EH&S sponsored a fume

hood competition in a chemistry building (Molecular Sciences Building) during Fall Quarter 2008. Competition behavior and long-term follow-up demonstrated an average sash height decrease of 13.4 inches to 8 inches in approximately 230 fume hoods. The reduction of 5.4 inches means an annual reduction of over 1,400,000 lbs of CO₂ emissions each year in MSB alone.

Green Office Certification Program

UCLA's Office of Sustainability has also recently begun a Green Office program for campus staff and faculty. Staff & faculty of campus departments can participate in an informal audit process about their office practices. Each office can designate a point of contact to coordinate with a UCLA Sustainability intern and complete a Green Office Evaluation. The evaluation will provide tips for each office to become more environmentally-conscious and attain Green Office certification.