2008 UCSC Sustainability Update





The University of California Santa Cruz is a committed partner in the regional Climate Action Compact. The campus has made significant progress on climate protection and campus sustainability. Here are examples:

- Energy efficiency projects completed since 2004 have lowered annual campus CO2 emissions by approximately 1,600 metric tons. These projects reduced CO2 emissions by reducing annual campus electrical consumption by 2.8 million kWh, and campus natural gas consumption by 113,000 therms. This CO2 footprint is equivalent to the annual emissions of 293 passenger vehicles or approximately 160 single family residential buildings.
- UCSC has been recognized by the national environmental publication, Plenty Magazine, for having the "greenest" student dining among U.S. universities, thanks to innovative local, organic food sourcing and waste reduction programs.
- UCSC has set aside 55% of its nearly 2,000-acre campus as natural habitat.
- The campus has reduced per capita water consumption by 40 percent, and has plans under development to reduce total annual use by another 20 to 30 million gallons.
- Thanks to aggressive, innovative trip-reduction programs, nearly six in ten people traveling regularly to and from the campus (vs. three in ten throughout the Santa Cruz community) use alternatives to single-occupancy vehicles.
- UCSC is committed to becoming even "greener" and more sustainable, and to a long-term collaborative relationship with the city and county that further reduces the region's collective carbon footprint.



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Energy and Climate:

UC Policy on Sustainable Practices Systemwide Goals¹:

Greenhouse Gas Emission Reduction:

- By 2014, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050 reduce 80% below 1990 levels

Renewable Energy:

By 2010, strive for 20% of power to be generated by renewables

• By 2014, generate approximately 10 MW of onsite renewable energy (throughout the UC system)



- Over 2.8 million KWh, equivalent to 1600 tons of CO2 are avoided due to energy efficiency measure implemented since 2004.
- The institution offsets 100% of its electrical load with Renewable Energy Credits (making it the sixth largest renewables purchaser in higher education nationwide).
- University Housing Services replaced 1,100 light fixtures in the student residential buildings with energy saving fixtures in the summer of 2008 for an annual savings of about 90,000 KWH.
- In addition to signing the Climate Action Compact, UCSC is a signatory to the American College and University Presidents Climate Commitment (ACUPCC).
- UCSC has completed a GHG inventory and is registered with the California Climate Action Registry.

Green Building:

UC Policy on Sustainable Practices Systemwide Goals:

• All new buildings will achieve a minimum of LEED "Silver" and strive for "Gold" or the equivalent and will outperform Title 24 by 20%.



UCSC Campus Activities:

- UCSC has submitted for LEED Existing Building "Silver" certification for Engineering 2, leading to annual energy savings of 900,000 KWH and 93,000 therms of natural gas savings.
- · UCSC has several new construction and renovation LEED certification projects

underway.



¹ UC "Presidential Policy on Sustainable Practices" sets systemwide goals. Full policy can be found: www.ucop.edu/facil/sustain/







Transportation:

UC Policy on Sustainable Practices Systemwide Goals:

• By 2010 UCSC will strive to increase the number of alternative energy fleet vehicles by 20% from the 2005 baseline and/or convert 50% of vehicles to non-carbon fuels.

UCSC Campus Activities:

- The campus fleet began using 20% biodiesel (B-20) in all vehicles in 2007.
- Last year UCSC launched the most successful university-based car-sharing program in the United States through a multi-year relationship with Zipcar. Membership now totals more than 630 participants 500 of whom are UCSC students, 65 are faculty or staff, and 65 are non-UCSC affiliates (community members).
- Nearly 60% of commuters reach campus by means other than single-occupancy vehicles (compared to only 28% by alternative vehicle use by county residents).
- Spring 2008 traffic volumes through the two campus entrances declined more than 16% from their high in Spring 2005—to the lowest levels seen since spring 1998.
- This October counts revealed more than 1,200 bicycle riders per day—an increase of more than 50% over bike ridership just last spring.
- Bike Shuttle service was extended to the UCSC Inn, ridership increased to 250 and 300 passengers daily.

Recycling and Waste Management:

UC Policy on Sustainable Practices Systemwide Goals:

- By 2012, achieve 75% diversion rate.
- By 2020, achieve Zero Waste.

UCSC Campus Activities:

- Increased overall recycling stream from 32% to 45% in FY 07-08.
- Implemented Zero Waste event programs serving thousands of participants.
 - Installed Multibins in residence halls to collect electronic and universal waste.



 Partnered with the County of Santa Cruz to divert food scraps to the county's compost program.

Purchasing:

UC Policy on Sustainable Practices Systemwide Goals:

- Minimum standard of 30% PCW paper for office supplies and uncut paper.
- Computer equipment purchases will achieve Bronze or higher under EPEAT.

Implemented battery recycling program.

- Purchase Green Seal Certified cleaning products.
- Purchase Energy Star rated products when available.

UCSC Campus Activities:

- Educational programs are being put in place for UCSC staff and a pilot program to achieve Zero Waste in offices is underway.
- A proposal is being considered to increase from 30% PCW paper to 100% PCW in basic office paper.





Land, Habitat, and Watershed:

• 55% of campus land is dedicated as protected natural landscape.

Food Systems:

- UCSC has been recognized as having the "greenest cafeterias" nationwide by Plenty Magazine for efforts to buy local and reduce waste.
- Trayless Initiative in UCSC Dining--saving over 30,000 gallons of water monthly, reducing food waste by 25-35%, and creating a less energy intensive infrastructure in the kitchen.
- Approximately a quarter of UCSC Dining Services' produce is organic, much provided through an innovative local sourcing arrangement with a local farmers cooperative.
- UCSC Dining Services has achieved "Green Certification" for 9 of 14 Dining Halls (through the City of Santa Cruz and Monterey Green Business Program)





Water Use and Conservation:

- Water consumption has risen only modestly since the 1980s: despite a 72.7% rise in enrollment since 1986-1987, annual campus water consumption increased only 4.2% (185.2 to 192.9 million gallons).
- Annual per capita water usage fell 40% since the 1980's (from 22,022 to 13,282 gallons per student).
- UCSC undertook a comprehensive water efficiency survey in 2007 that suggests a number of possible conservation projects that could result in a 10-15% reduction in total annual water use (saving 20 to 30 million gallons per year).

Governance and Decision-Making Structures:

- The Chancellor's Council on Climate Change was established in February 2008.
- In 2007, a two-year pilot Sustainability Office with a Coordinator position was



created.

 UCSC completed a Campus Sustainability Assessment and launched a campus sustainability website: <u>http://sustainability.ucsc.edu</u>

