2007 Annual Report on Sustainability Policy

Michael J. Bocchicchio, A.I.A. Assistant Vice President January 15, 2008

Defining Sustainability

"Sustainability refers to the physical development and institutional operating practices that meet the needs of present users without compromising the ability of future generations to meet their own needs, particularly with regard to use and waste of natural resources..."

- UC Board of Regents, GB102, June 2003

Introduction

- Dec 2002 Regents requested feasibility study for Green Building/Clean Energy policy
- July 2003 Regents approved Green Building/Clean Energy policy principles
- June 2004 Presidential Policy and Policy Guidelines issued requiring annual progress report
- Jan 2006 Policy expanded to include sustainable transportation and climate change
- Mar 2007 Policy expanded to:
 - > include operations, waste reduction, and purchasing
 - further define climate protection and building renovations

Highlights of 2007 Accomplishments

- 1. Green Building
- 2. Clean Energy
- 3. Climate Protection
- 4. Transportation
- 5. Operations
- 6. Waste Reduction
- 7. Procurement
- 8. Faculty, Staff, and Student Collaboration
- 9. Training
- 10. External Recognition

1. Green Building Projects

- 65 new construction projects under Policy
 - ➤ 36 Silver rating or higher



- ▶ 6 Silver rating or higher
- 47 new construction projects approved pre-Policy have green building goals
 - ≥ 14 Silver rating or higher



Price Center, UCSD - UC Silver



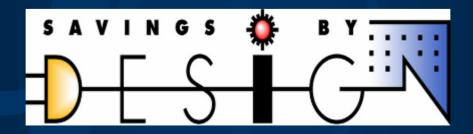
Tahoe Center, UCD - LEED Platinum



Central Plant, UCM - LEED Gold

2. Energy Efficiency in New Buildings

- Savings By Design Program
 - ► Whole Building Analysis & Life Cycle Costing
 - >180 projects, 14.7 million GSF registered
 - >\$5.1 M projected incentives received
 - >\$6.0 M projected annual energy savings

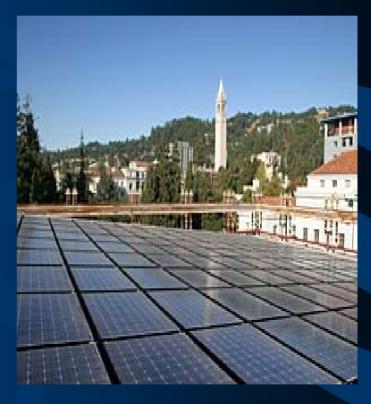


3. Energy Efficiency in Existing Buildings

- \$7 M projected annual cost savings from:
 - > \$6M in energy projects paid for by '04-'05 CPUC grant (savings: \$2M)
 - > \$10M in energy projects from '06-'08 CPUC grant (savings: \$5M)
- Strategic Energy Plan
 - identify and prioritize \$500M in additional energy projects to achieve 10% reduction goal
 - ➤ Utilities have tentatively agreed to increase grant level to fund about 60% of the cost of these projects
- CEC renewed \$3 million grant for demonstrating new technologies

4. Onsite Generation and Procurement of Renewable Energy

- 18% renewables in electricity contract
- 100% of UCSC's electricity from renewable energy
 - > #6 on EPA's top 10 list of universities
- Solar PV
 - > UCSF Mission Bay Campus
 - Small system installed at UCSD



UC Berkeley's 120 kW PV array, located on Martin Luther King Student Center roof

5. Climate Change

- 8 campuses joined California Climate Action Registry
- UC Berkeley Climate Action Plan
 - Chancellor: reduce emissions to 1990 level by 2014
- President Dynes signed American College and University Presidents Climate Commitment

6. Sustainable Transportation Practices

- UC Fleet CO₂ emissions down 4%
- "Business Case Analysis for Parking Structures" guidelines drafted
- 2007 Best Practice Awards:
 - > Irvine: 100% biodiesel shuttle buses
 - > Irvine: increased average vehicle ridership
- Santa Cruz carshare program for campus and city
 - Carshare programs now on 8 of 10 UC campuses
- UCLA campus-airport bus shuttle

7. Sustainable Operations

- By July, 2008, all campuses to submit at least one building for certification through the LEED for Existing Buildings program
- UCSB Girvetz Hall, UCOP Franklin St. received LEED-EB "Silver"
- UC Santa Barbara plans to certify 25 LEED EB Buildings in five years
- UC Merced plans to certify all its buildings through LEED-EB



UCOP Franklin Building, LEED-EB Silver (2007)

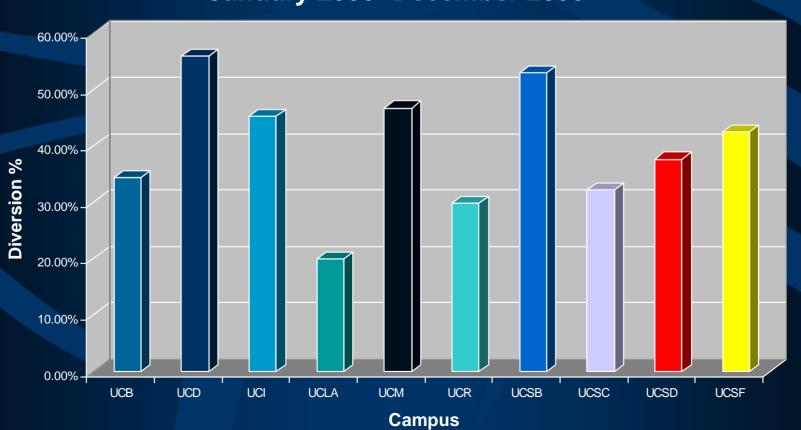


UCSB's Girvetz Hall Project team receiving LEED-EB Silver plaque (2005)

8. Recycling and Waste Management

- Preliminary Integrated Waste Management Plan completed
- First annual UC Waste Reduction and Recycling Report:

Diversion Rate by Campus January 2006- December 2006



9. Procurement

- Vendors required to track UC sustainable product purchases
- Sustainability included in Strategic Sourcing training programs and vendor fairs
- Sustainable product offerings now available in 17 strategically sourced contract areas
- All Office equipment must be ENERGY STAR certified
- 30% recycled content paper cheaper than virgin paper

10. Student, Faculty and Staff Participation in Sustainability Activities:

- Campus Sustainability Committees meeting regularly on all 10 campuses
 - Including new committees at UC Riverside and UC Merced
- UC Berkeley funding 25 student interns working on sustainability projects in campus and community
- UC Berkeley students pass fee referendum to fund sustainability projects
- UC Santa Cruz students, faculty and staff are transforming dining services; UCSC purchases 30% of its produce from local organic farm cooperative



UC Berkeley Chancellor Birgeneau presenting the annual Sustainability Award to students & staff



UC Irvine Chancellor Drake meeting with representatives of environmental student groups

11. Training

- 6th Annual Sustainability Conference: 850+ attend
 - Largest higher education sustainability conference ever!
 - > 3rd Annual Best Practice Awards
- UC PMI offered 20 energy efficiency training sessions
 - ➤ 250+ individual staff participants







Award winners and attendees at the 6th
Annual UC/CSU/CCC Sustainability
Conference, UC Santa Barbara June 2007

12. External Recognition







- UC sustainability initiatives mentioned in over 75 new stories, including articles in national news media
- UC wins 14 separate sustainability awards in 2007
- UC recognized as a leader in all higher ed. sustainability rankings in 2007









Future Steps

- Continue efforts to meet goals in all 7 Policy sections
- Continue to evaluate raising green building target from Silver to Gold and minimum requirement from Certified to Silver

 Develop proposal for guidelines on sustainable food systems "When such a large and important educational institution takes such significant, systemic steps toward addressing global warming it can't help but influence the thinking of many tens of thousands of students. If students carry these strong environmental values back to their communities and into their careers, UC's initiative will reverberate globally."

- Bob Sipchen, Editor-in-Chief, Sierra Magazine

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