



University of California

Proposed 2009-2011 Statewide Energy Partnership

Katherine N. Lapp – Executive Vice President
Michael J. Bocchicchio – Assistant Vice President
September 17, 2008

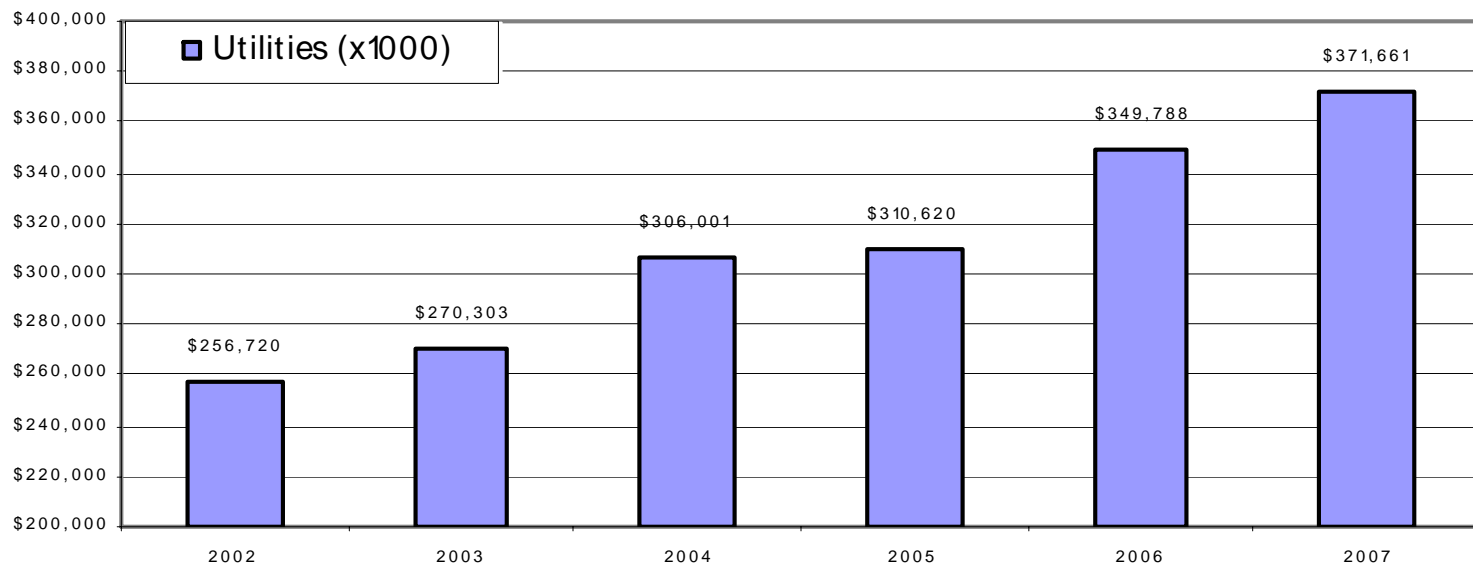


Facilities Operations and Energy Cost Challenges

- Dramatic increase in utility costs
- Severe pressure on purchased utilities and operations budgets
- Lack of adequate capital renewal funding
- Ambitious Sustainability Practices Policy goals



Challenges - Purchased Utilities Cost Increased 8% Annually Since 2002





Challenges - Adequate and Predictable Capital Renewal Funding Is Lacking

- Funding for renewal not included in allocations for ongoing building maintenance
- 50% of all buildings are older than 35 years



Challenges - University Policy on Sustainable Practices - Ambitious Goals

- Requires new facilities design to use 20% less energy below prevailing Title 24 standards
- Reduce systemwide energy consumption to 10% below 2000 levels by 2014
- Reduce Greenhouse Gases
 - By 2014 to 2000 levels
 - By 2020 to 1990 levels
 - Become climate neutral as soon as possible



Previous Statewide Energy Partnership Programs

Background

Previous Partnerships - 2004-2005 & 2006-2008

- Partners included electric utility companies
- Met mutual energy usage reduction goals
- Special incentive grant program based on each kilowatt-hour and therm saved in first year
- Provided for engineering assistance
- Simplified incentive application process for UC



Previous Statewide Energy Partnership Program

Background (continued)

- Since Partnership program inception, UC has implemented \$46M worth of energy projects
- Utility companies have provided \$23.5M of incentive grants for these projects
- Energy savings are ~ \$5M per year



Addressing the Unmet Challenges

Strategic Energy Plan

- Identifies energy efficiency project opportunities over 6 years
- Prioritizes the full array of projects and energy efficiency initiatives available to UC
- Will provide data and analysis to substantiate true cost of energy and purchased utilities
- Provides methodology to document energy savings and Greenhouse Gas emission reductions



Addressing The Unmet Challenges - Expanded Statewide Energy Partnership

Partnership for 2009-2011

- Expand by factor of 7
- Campuses selected ~1,300 projects for implementation
- Project cost approximately \$290 million
- Requires a UC commitment to the utility company partners to achieve energy savings



Proposed Statewide Energy Partnership - Positive Financial Impact

Estimated utility company incentive grants

- Approximately \$75 million

Simple Overall Payback

- Average of 5.6 years after incentive grant

Energy savings

- Projected annual energy savings ~ \$38 million

Financial impact

- 15yr Debt Service ~ \$22 million per year

Remaining funds for other campus priorities

- \$38 million - \$22 million = \$16 million per year



Proposed Statewide Energy Partnership - Energy Savings and Greenhouse Gas Emission Reductions

Systemwide Electricity Savings

- 240,000,000 kilowatt-hours out of 2,000,000,000 kilowatt-hours used (12%)

Systemwide Natural Gas Savings

- 15,500,000 therms out of 150,000,000 therms used (10%)

Greenhouse Gas Emission Reduction

- 170,000 Metric Tons or 14% of purchased utilities “carbon footprint”



Proposed Statewide Energy Partnership - Leveraging Resources and Past Success to Meet Future Challenges

Reduces purchased utilities costs

- Narrows the purchased utility budget shortfall
- Makes funds available for other campus purposes

Reduces capital renewal backlog

- Leverages utility incentive grants simultaneously for capital renewal
- Reduces need for emergency funding

Assists with meeting Sustainability Policy goals

- Each energy unit saved mitigates a unit of greenhouse gas emission
- Energy efficiency projects contribute to attaining the Policy's goals



Proposed Statewide Energy Partnership - Next Steps

Regents' action in November 2008

- Projects' budget approval for 2009-2011 Statewide Energy Partnership Program
- Authorization for external financing



University of California

**Proposed 2009-2011
Statewide Energy Partnership**

*Katherine N. Lapp – Executive Vice President
Michael J. Bocchicchio – Assistant Vice President,*

September 17, 2008