

PG&E Food Service Technology Center  
**California Community College Seminar**  
 February 28, 2008

## CCC-IOU Energy Efficiency Partnership Program Overview

California Community Colleges Chancellor's Office  
 Southern California Edison  
 San Diego Gas & Electric  
 Southern California Gas  
 Pacific Gas & Electric Company



Partnership Overview

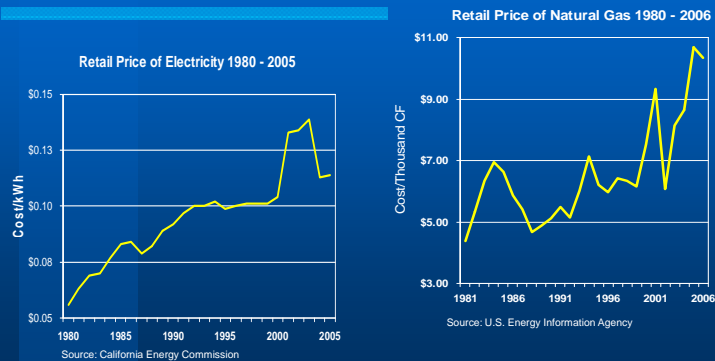
## The Big Picture

- **Challenges and Opportunities for the California Community Colleges**
  - Evolving public policy and public opinion
  - Environmental benefits of using less energy
    - Resource conservation, reduced air and water pollution
    - “Meeting the needs of future generations”
  - Reduction of Greenhouse Gas emissions (AB 32)
    - Energy savings = Greenhouse Gas reduction
  - Governor’s Green Building Initiative (Executive Order S20-05)
  - CCC Board of Governors Sustainability Policy includes energy efficiency goals
  - Integration with District Sustainability policies
  - Economic benefits of Sustainability

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Partnership Overview

## The Cost of Doing Nothing



*Dollars spent on energy are dollars taken out of the classroom!*

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Partnership Overview

## How to meet the Challenge

- **CPUC approved over \$2B in IOU energy-efficiency funding for 2006-2008**
- **CPUC expected outcomes**
  - Cut energy costs by more than \$5 billion
  - Eliminate the need to build 3 large power plants over the next 3 years
  - Reduce global warming pollution by an estimated 3.4 million tons of carbon dioxide by 2008
  - Meet goals of Governor’s Green Building Initiative (Executive Order S20-05)
- **Local Government and Statewide Partnerships constitute a significant portion of investment**

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## CCC/IOU Energy Efficiency Partnership

- The 2006-2008 CCC-IOU Energy Efficiency Partnership is designed to
  - Identify energy savings opportunities
  - Provide funding and support for energy efficiency projects
  - Provide a framework and mechanism for the implementation of a comprehensive sustainability policy
- The Partnership is comprised of four key elements
  - Retrofit projects
  - Monitoring-Based / Retro-Commissioning (MBCx / RCx) projects
  - New Energy Efficient Construction (e.g. Central Plants)
  - Training and Education activities
- Anticipate continued funding in 2009 – 2011
  - But need active involvement from CCC Districts to ensure ongoing IOU investment; portfolio will be “project based”

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## Who is involved?

- All four Investor-owned Utilities
  - PG&E, SCE, SDG&E, SCG
- CCC Chancellor's Office
- All CCC Districts
- Newcomb | Anderson | McCormick
  - Program administration and management

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## What are Community Colleges doing?

- Lighting Retrofits
  - New generation 25 watt T8 lamps
  - T5 or T8 high bay lighting in gyms
  - LED exit signs
  - Bi-level stairwell lighting
  - Occupancy sensors in classrooms, offices, gyms
  - Daylighting control
- Reducing Plug Loads
  - Vending machine controllers
  - LCD monitors
  - Network PC power management
  - Server Virtualization



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## What are Community Colleges doing?

- Building HVAC and Central Plant Upgrades
  - Central plant expansion
  - Constant volume to VAV retrofits
  - New or upgraded EMS
  - New boilers, chillers, motors, steam traps
  - Demand control ventilation in gyms, lecture halls
- Swimming Pool Systems
  - Pool covers
  - Condensing pool boilers
  - Pool pump VFDs
- Monitoring-Based / Retro-Commissioning (MBCx / RCx)

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## What if we've done "everything"?

- Consider unexplored opportunities
  - MBCx / RCx
  - New technologies
  - New generation lighting
    - Technology changes every 3 – 5 years
  - New construction
    - LEED, Exceed Title 24
  - Central plant projects
    - Retire aging package units
  - Evaluate energy efficiency during capital project and maintenance planning
- Energy optimization is continuous, not a one-time fix

*The Partnership Team can help you explore these opportunities!*

## Partnership Program Status

### Approved Projects to date

	kW	kWh	Therms	Funding	Estimated Annual Avoided Cost
<b>Approved Totals (all IOUs)</b>	18,756	60,245,545	1,476,947	\$ 15,510,413	\$ 8,411,023
<b>Goals</b>	19,292	84,089,217	2,522,362	\$ 22,083,317	\$12,108,596
<b>% of Goal</b>	97%	72%	59%	70%	
<b>Remaining through 2008</b>	536	23,843,672	1,045,415	\$ 6,572,045	

*Funding is still available – but time is running short!*

## Incentive Levels

	Measure	Incentive Rate
Electric	Packaged HVAC, HVAC Controls, Motors, Drives	\$0.24/kWh
	Lighting, Lighting Controls, Daylighting	\$0.15/kWh
	Central Plants, Chiller Retrofits, Whole Building, and other major Energy Efficiency Infrastructure Projects	\$0.32/kWh *
	MBCx	\$0.32/kWh
	Plug and Process Loads / IT Projects	\$0.15/kWh
Gas	All Gas Measures	\$1.00/therm

\* \$0.24/kWh in SCE territory

*Up to 3x the rate of traditional IOU incentives*

## Be a LEADER in Energy Efficiency!

### How to Participate

#### Work in Partnership with the Utilities to:

- Develop a local Sustainability / Energy Policy
- Brainstorm ideas for energy savings opportunities at your campus with your Staff and Utility representative
  - New Construction Bonds are a significant opportunity to “design in” energy efficiency
- Consider performing an Energy Audit at your campus
- Attend a Partnership training and education session
- Contact local utility representative and request assistance with Project Application form for CCC-IOU Partnership

*Act now to make the most of these BENEFITS to your District.  
The Partnership Team is here to help!*

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For more information check Program Web Site at:  
[www.cccutilitypartnership.com](http://www.cccutilitypartnership.com)