



Peralta CCD District

Energy and Sustainability  
Implementation Program

Solar Possibilities at Peralta



## Energy and Sustainability Implementation: Program Overview



- Peralta CCD is exploring ways with Chevron ES to reduce Peralta's energy use and explore alternative/renewable methods of energy generation to meet or exceed Peralta's Environmental Sustainability Policy goals.
- Early Action Program: Construction by the end of the year
  - Solar Possibilities - Solar Parking Canopies and Solar Farm at Laney and Merritt, taking advantage of 2008 incentives & rebates
  - Energy Efficiency – District-wide Retro-commissioning
  - District-wide energy monitoring/sub-metering
- Phase I and Phase II
  - More Solar Possibilities – College of Alameda, and additional opportunities at Merritt and Laney
  - Energy Efficiency Improvements
  - Energy Infrastructure Upgrades/Installations – Central Plants, Geothermal, Cogeneration, etc



# Early Action Program: Solar Possibilities at Laney College



Project Description:

- 1MW Parking Lot canopy structure
- 1.4M kWh per year
- 20% of Laney's annual electrical consumption



# Early Action Program Solar Possibilities at Merritt College



## Project Description:

600KW Parking-Lot canopy structure

800KW Hill-side ground-mount farm

1.4MW Total

60% of Merritt's annual electrical consumption



# Fresno State University – Parking Canopy



12 ft. clearance



# San Jose Unified School District – Parking Canopy, 5° tilt



12 ft. clearance



# Early Action Program: Implementation Timeline



## Immediate Next Steps, 2008

- Complete meetings with College Presidents and Facilities Committees to review solar possibilities
- Secure incentives on behalf of the District
- Prepare and Present Financing Options and Structures to Board and District Staff
- 5/6/08: Seek Board Approval to Negotiate an Implementation Contract
- Run a competitive process on the financing, subcontractors and equipments
- Present to Facilities Committee

## Summer 2008

- 6/6 Execute Implementation Contract
- Complete Design
- Obtain DSA Approval

## Fall 2008

- Complete Installation
- Commission Systems and Provide Training
- 1/1/09 Ribbon Cutting Ceremony!



# Generalized Financing Scenarios

Power-Purchase Agreement (PPA)	Bond Purchase	Hybrid
<p>3<sup>rd</sup> party spends initial capital for installation and procurement; owns system and electricity</p> <p>3<sup>rd</sup> party receives rebates and incentives.</p> <p>PCCD purchases the electricity at rate equal to or lower than utility rate for the life of the system (25 years)</p>	<p>PCCD spends initial capital for install and procurement; owns system and electricity</p> <p>No rebates or incentives.</p> <p>PCCD purchases remainder of electrical needs through utility</p>	<p>3<sup>rd</sup> party spends initial capital for install and procurement; owns system and electricity</p> <p>3<sup>rd</sup> party receives rebates and incentives.</p> <p>PCCD purchases the electricity at rate equal to or lower than utility rate for 7 years.</p> <p>PCCD purchases system for Fair Market Value after 7 years.</p>

Department of General Services staff will present more detailed financing structures with recommendations on May 6<sup>th</sup>.



# Energy and Sustainability Implementation Program Goals and Benefits



- Economic Leadership – Generate General Fund savings through reduced energy and operating costs.
- Educational Opportunities – Make Peralta CCD a model for Environmental Education Center and connect students to the green economy with an living laboratory for a renewable energy.
- Environmental Stewardship – Reduce Peralta CCD’s carbon footprint pursuant to the Sustainability Policy.
- Positive Public Recognition and Community Outreach – Peralta CCD sets an example for the community and the country.