CVSR PROJECT BENEFITS FACT SHEET

AVOIDED GHG EMISSIONS:

255,000 TO 333,000 METRIC TONS/YEAR

Solar power displaces power produced by burning carbon-based fuels in conventional power plants. The CVSR will produce about 679,000 megawatt hours annually. Greenhouse gas emissions would be reduced by up to 333,558 metric tons of CO_2 equivalents per year with a total reduction of up to 8,339,000 $MTCO_2e$.

"Real world" emissions equivalent* to:

	Annual	Lifetime
Cars on the road	49,000	1,225,000
Gallons of gasoline	28,750,000	718,750,000
BBQ propane cylinders	10,650,000	266,250,000
Railcars of coal	1,300	32,500

* – conservative estimate: EPA methodology yields higher results

U.S. EPA 2011a. *Green Power Equivalency Calculator* Website – http://www.epa.gov/greenpower/pubs/calculator.htm.

U.S. EPA 2011b. *Greenhouse Gas Equivalencies Calculator* Website – http://www.epa.gov/cleanenergy/energy-resources/calculator.html.
(see Attachment 1)

AVOIDED POWER PLANT EMISSIONS:

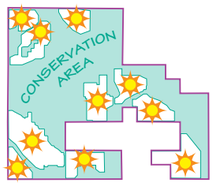
NOx – TO 270,000 LBS/YR
SO_2 – TO 14,000 LBS/YR

- The Energy Payback Time to offset emissions from construction of CVSR is estimated at 1.4 years.
- It is estimated that the following emissions would be emitted from an equivalent-sized fossil-fueled power plant:

	NOx (lbs/yr)	**SO_2** (lbs/yr)
Natural Gas	47,500 to 270,000	7,000 to 14,000
Coal	2,650,000	815,000

Emission factors from Appendix D of the CARB's *Proposed Regulation for a California Renewable Electricity Standard - Staff Report: Initial Statement of Reasons* (CARB 2010).

(see Attachment 2)



BIOLOGICAL CONSERVATION:

- **6,000 AC. PROTECTED FOR SPECIES**
- **CA VALLEY CONSERVATION: $500K**
- **10 MILES OF FENCE REMOVED**

The CVSR will offset project impacts and enhance and conserve additional species habitat. It will provide for:
- Additional offsite conservation through funding to acquire and consolidate small lots to promote permanent habitat connectivity;
- Mitigation by conservation of land at a ratio of 4:1 for protection of the giant kangaroo rat and the San Joaquin kit fox, yielding benefits to a wide range of common wildlife and species of special concern; and,
- Fence removal to improve large animal movement.

California Valley Land Acquisition Program is MM BR-34.1. Fence removal is MM BR-31.1. Additional conservation for protection of common wildlife and species of special concern is in BR-1.4, BR-16.2, and BR-22.2.
(see Attachment 3)

POLICY GOALS:

- **CA RENEWABLES PORTFOLIO STD**
- **SLO CONSERVATION AND OPEN SPACE ELEMENT**
- **SLO COUNTY CLIMATE ACTION PLAN**

California's Renewables Portfolio Standard requires a 20% renewable energy delivery by 2010. The state has established a further goal of reaching a 33 percent renewables by 2020. SLO County Climate Action Plan encourages development of renewables. Construction of the CVSR Project will establish San Luis Obispo County as a leader in energy conservation and GHG reduction. It will advance the County's efforts to reduce GHG and increase use of renewable energy. It will contribute to an environmentally sustainable supply of energy. It will also encourage and support the development of solar power as a commercial energy enterprise.

California Senate Bill 1078
Executive Order S-14-08, and
San Luis Obispo County General Plan Conservation and Open Space Element (COSE).
SLO Climate Action Plan.
(see Attachment 4)

ECONOMIC BENEFITS:

CONSTRUCTION & OPERATIONS
$10 MILLION IN TAX REVENUES;
$315M TOTAL ECONOMIC BENEFIT
350 CONSTRUCTION JOBS

The CVSR Project will benefit the local economy directly through additional jobs and revenue from sales and property taxes. Indirect economic benefits will result from project spending in the local supply chain, and induced economic benefits from employee spending.
Tax revenues estimated at $10,000,000.

Economic Activity	**Salaries**	**Economic Output**
Project Development	$103,000,000	$170,000,000
Local Supply Chain	$15,000,000	$67,000,000
Employee Spending	$18,000,000	$78,000,000
Total Economic Benefit	**$136,000,000**	**$315,000,000**

"Economic Impact to San Luis Obispo County of the California Valley Solar Ranch"; prepared by Stephen F. Hamilton, Professor and Chair of Economics, Orfalea College of Business, California Polytechnic State University; and Darin Smith & Tepa Banda, *Economic & Planning Systems, Inc.*; December 13, 2010.
(see Attachment 5)

COMMUNITY BENEFITS:

- **271,000-GAL WATER TANK AVAILABLE FOR FIREFIGHTING**
- **RECLAIMED GYPSUM MINES**
- **COMMUNITY ENERGY EDUCATION**
- **HIKING TRAIL & OVERLOOK**

The CVSR will:
- Improve fire safety by making a 271,000-gallon water tank available to CalFire for off-site fire fighting
- Reclaim two idle on-site gypsum mines and improve site drainage
- Provide a hiking trail and Sunrise Overlook to increase local recreational opportunities
- Commit $150,000 for solar and renewable energy education in the California Valley.

County of San Luis Obispo, Department of Planning and Building. *"Final Environmental Impact Report, California Valley Solar Ranch, Conditional Use Permit (DRC2008-00097) and Twisselman Conditional Use Permit / Reclamation Plan (DRC2009-00004),"* State Clearinghouse No. 2009021009. January 2011. Ongoing discussions regarding conditions of approval.
(see Attachment 6)

REFERENCES