



Grid Tied Photovoltaic System for Christ Church Episcopal of Portola Valley & Woodside

January 22, 2010

- Benefits of Solar
- How Solar Works
- SunPower Overview
- Cobalt Power Systems Overview
- State and Federal Incentives
- Cost of System – Non-Profit vs. For Profit
- PV System Layout
- Q&A

A photograph of a man and a woman from behind, looking at the sun. The man is on the left, and the woman is on the right. They are both looking towards the sun, which is low on the horizon, creating a bright, golden glow. The man's hands are raised towards the sun, and the woman's hand is also raised. The background shows a landscape with hills or mountains under a clear sky.

Economic & Energy Benefits of Solar

- 1** Eliminate or significantly reduce the electricity bill
- 2** Help move US toward energy independence
 - take advantage of govt. incentives
 - “time of use” net metering selling at higher rate & buying at lower rate
- 3** Benefit the environment = carbon footprint reduction equivalent to planting 105 acres of trees.

How Solar Works



1 SunPower solar cells automatically convert sunlight into electricity up to 50% more efficiently than conventional cells. SunPower solar panels contain no moving parts, are highly durable, and have excellent low light performance for producing energy even on cloudy days.

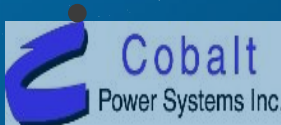
2 The SunPower inverter converts DC power from the solar panels into AC power for household use.

3 The electric meter spins backward when solar production exceeds household use, crediting surplus electricity against your monthly bill. For financed systems, the savings may completely offset monthly payments.

SunPower Overview

- Over a quarter century of experience
- Over 500 large-scale systems on 4 continents
- Publicly traded (NASDAQ) with top-tier financing partners
- Over 85 patents and 25 years of R&D
- World record cell efficiency
- Aesthetically pleasing panels
- Over 300 dealers and growing rapidly worldwide
- 25-year power output warranty
- 10-year product defect warranty
- The planet's most powerful solar

Established and Proven Technology Leaders



World's Most Efficient Solar Products



50% Higher Efficiency = More Power (kW/ft²)
or Smaller Footprint

SUNPOWER[®]

Premier Dealer

The Best in the Business

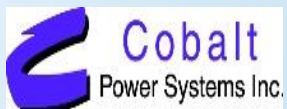
- Premier Dealers are equipped with the most advanced training, products and services that SunPower has to offer.
- Premier Dealers must adhere to a stringent set of performance standards that cover:
 - Service
 - Quality of installation
 - Post-installation site inspection
- Installations completed by Premier Dealers are inspected at random according to SunPower's 85 point inspection.
- Premier Dealers have also completed SunPower's certified training programs, so they can provide you with a superior experience to match SunPower's superior products.

Cobalt Power Overview



Cobalt Power Systems, Inc.
2444 Old Middlefield Way
Suite F
Mountain View, CA 94043
Tel 650-938-9574
www.cobaltpower.com

- **7 years experience; Over 350 PV systems installed**
- **Specialize in residential and small commercial solar**
- **Full service solar contractor (CA C-10 Lic. #820697)**
- **Focus on quality, customer service, aesthetics**
- **Diamond Certified™**
- **Strong community involvement: GRID Alternatives, Sierra Club, Atherton GreenSTART, CALSEIA, Chamber of Commerce, NCSEA, SolarTech**
- **Over 100 systems installed in Los Altos Hills/Los Altos**



State and Federal Incentives

- California Solar Initiative (CSI): Currently at \$1.10 per Watt for Nonprofit/Government , \$1.10 for Commercial
- Rebate drops based on the amount of solar installed region-wide. Next drop will be to \$.65 per Watt, -45%
 - After rebate confirmation, one have 12 months to install
- 30% Federal tax credit
- Rebate and tax credit pay for ~35-40% of total system cost

Consult your tax advisor to verify applicability in your particular case

21KW System: Payback and kWh Cost Comparison

Without Solar vs. **With Solar**

With Current consumption, Christ Church will spend \$375K on electricity over the next 25 years

		Payback if paid in Cash	Cash Flow Positive if Financed	Cents per kWh Current	Cents per kWh @ Yr. 10	Cents per kWh @ Yr. 25	25 yr. Electricity Cost Savings
Without Solar		NA	NA	\$0.16	\$0.28	\$0.80	NA
With Solar	Non-Profit	10.5 yrs.	15.5 yrs.	\$0.11	\$0.11	\$0.11	\$375,387.00
With Solar	Commercial	6 yrs.	Year 1 = \$7,945.00	\$0.085	\$0.085	\$0.085	\$375,387.00

Notes: Without Solar kWh costs based on average cost for that year.

- **With Solar** kWh costs averaged over 25 years, system paid in cash.
- Cost savings **With Solar Commercial** does not include tax deduction on savings from yearly electricity costs.

What else Tim?

