



Go Solar Santa Cruz

RESIDENTIAL SOLAR CASE STUDIES

Join your neighbors in saving energy and money!



Tamara & Gerry Doan

SOQUEL HILLS

System Size: 3.2 KW

Type of System

- * Number of panels: 16
- * Panel manufacturer & model: Kycoera Solar KD234GX-LP8
- * Inverter manufacturer & model: Enphase Energy D380-72-240-S1x (8 total microinverters)

Date installed: November 2011

Estimated solar production per year: 5,114 kWh

Baseline utility energy usage: unknown

Portion of electricity demand met by system: 95%

Average utility cost at time of installation: 12 cents/kWh

Cost of system before rebate and tax credit: \$21,816

State rebate amount: \$1,895

Federal tax credit amount: \$6,545

Type of financing: Direct purchase

Final costs: \$13,376



See the City's Residential **Go Solar** brochure and worksheet for a comparison of the advantages and disadvantages of each financing option and guidance on decision-making.

Residing on a half-acre lot that slopes 200 feet in elevation means

Tamara and Gerry Doan sit right above the fog line most days, which, when combined with the orientation of their house, makes their property a great choice for solar. Seeking a smaller, safer community and higher quality of living by being in close proximity to beaches, mountains and parks, the Doans moved to the Santa Cruz area from LA over a decade ago. With fruit trees peppering their lot, weekly deliveries of Community Supported Agriculture produce boxes, and other low-impact, local-focused efforts, the Doans were already committed to sustainable urban living. As environmental professionals, the Doans cite their sustainability values and reduced energy costs as the primary factors in why they invested in a solar system. The Doans also were interested in purchasing a system over leasing so they would be able to retain the Renewable Energy Credits associated with offsetting grid produced electricity and face no system ownership issues if they sold their property.

After getting two quotes, their 16 cell system was installed in the fall of 2011 by a local contractor and is offsetting almost 100% of the electricity the Doans' 2-person household consumes. Tamara says that the system installation was very straightforward, taking only 2 days, and that others considering purchasing a solar system should just do it! Since installation, the Doans have hosed down their panels once and plan to do a cleaning and servicing in 2014. Since the Doans plan to stay in their home for a long time, the estimated 7 year payback means they will be saving money very soon. The Doans monitor their system's performance through a web-based monitoring dashboard, allowing them to make better informed decisions on major equipment purchases, like the electric vehicle they are considering. Tamara and Gerry are happy with their system and look forward to many days of sun and free electricity!

Do you have any questions about solar installation in the City of Santa Cruz? Contact our Green Building Program Environmental Specialist at (831) 420 - 5124!