

Go Solar Santa Cruz RESIDENTIAL SOLAR CASE STUDIES join your neighbors in saving energy and money!



Garrett & Tara Neier West SIDE SANTA CRUZ

System Size: 3.92 KW Type of System:

- Number of panels: 16
- * Panel manufacturer & model: REC Solar REC245PE
- Inverter manufacturer & model: Sunny Boy -
- SMA America SB3000US (240V) Date installed: February 2013

Estimated solar production per year: 5600kWh Baseline utility energy usage: 3000kWh Portion of electricity demand met by system: 100% Average utility cost at time of installation: about 9 cents/kWh Average cost of solar electricity over 20 years: 9 cents/kWh Cost of system before rebate and tax credit: about \$16,000 State rebate amount: about \$632 (Sunrun received this) Federal tax credit amount: \$4,600 (Sunrun received this) Type of financing: Leased through 20 year power purchase agreement from Sunrun Final costs: \$10,739 (paid through monthly billing



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.

Dreams of installing a hot tub and a promotional campaign by a group of Silicon Valley companies pushed the Neiers off the fence and into a residential solar installation. High tech professionals, Garrett and Tara were already fairly energy conscious, installing energy efficient appliances in their home and a greywater system to irrigate their landscape, and even drying their clothing outside when possible.

In considering solar, the Neiers did their homework by understanding their electricity usage and realized they would soon be exceeding their baseline tier for electricity billing. When Sunrun proposed a 20 year power purchase agreement (PPA), they realized, however, that with only 5 to 10 years left remaining on the life of their current roof, a new roof installation was necessary. After they installed the new roof, solar system, and that dream hot tub, the Neiers noticed they were producing more electricity than they were consuming. So, when Garrett needed a new commuter car, an electric vehicle just made sense. While they do have natural gas heating, their 16 panel solar PV system covers 100% of their 3person family's electricity needs.

Because their system is a PPA lease arrangement, Sunrun owns the panels and equipment. They monitor the output and are responsible for maintenance and replacing any parts that fail, including the expensive inverter. The Neiers like that someone else is responsible for these aspects of their system and are very satisfied with their solar experience in Santa Cruz.

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!