

# Hiebert Solar House

## San Jose, CA



### Summary and Benefits

System Size:	PV@9.9 KW CEC/AC
Annual Production:	16400 kWh
Old Electric Bill:	\$388/mo
New Electric Bill:	\$0/mo
Cost Savings (25 years):	\$248,632
% Power Offset:	92%
% Electric Bill Offset:	100%
IRR over 25 years:	16.8%
Simple Payback:	10 years



### System Profile

Modules:	54 Sunpower 210 BK-U
Inverter:	2 X Sunpower 6000W (SMA)
Standoffs:	Sunpower
Racking:	Unirac

### House Profile

Because the solar system is on the front of the house, the physical look or the product was extremely important. Clean Solar consulted with the home owner to determine the panels and system that had the best look. A symmetrical layout was designed and approved by the homeowner. The homeowner also decided he wanted to zero out his electrical bill and prepare for future plug-in hybrid and higher energy use in the future. The system was designed to meet these expectations for future energy expansion in the household.



### Components Profile

The 11.3Kw DC system size is one of the largest systems you will see on a residential home. The system required 6 electrical strings and 2 inverters. The roof is a 50 year metal. The metal roof is laid over a wood shake roof. This is one of the tougher roofing surfaces seen in the residential solar market. 7 inch lugs had to be used to secure the system to the base structure. Because metal roofs dent easily, Clean Solar had to be careful and minimize the amount of time on the roof to make sure the roofing structure stayed in "like new" condition.