

# Farrar Green Home

[www.FarrarGreenHome.org](http://www.FarrarGreenHome.org)



## EA10 Renewable Energy System

8.46kW DC (7.32 kW AC) system

CEC PV Calculator determines 11,906kWh annual production

Title 24 calculations show 3,548kWh annual energy use, compared to 7,692kWh (standard)

Solar production is 154.8% of energy use

[36 Sharp NU-U235F3 panels](#)

[1 SMA America SB8000US inverter](#)

### CEC PV Calculator - Inputs

Project Title:	Farrar Residence
Number of Sites with Solar:	1
Number of Inverters per Site with Identical Details:	1
California Flexible Installation:	No
PV Module:	Sharp NU-U235F3
Standoff Height:	Roof Mounted (greater than 3.5 inches from roof)
Mounting Height:	Two-Story
Number of Series Modules in each String:	12
Number of Parallel Strings per Inverter:	3
Tracking:	Fixed
Roof Pitch:	Enter Tilt: 10 degrees
Azimuth:	200
Inverter:	SMA America SB8000US (240V)
City Used in Calculator Run:	Escondido
Incentive Type:	All other Market Rate Housing
Minimal Shading:	No

Shading Azimuth  
E (79-101)  
ESE (101-124)

Obstruction Type	Distance	Angle
On Roof Obstruction (Measured Angle)	-	38 degrees
On Roof Obstruction (Measured Angle)	-	48 degrees

### CEC PV Calculator - Results

kWh Production per Site	kW AC system size per Site	<input type="text" value="7.32"/>
January <input type="text" value="716.6"/>	Annual kWh per Site	<input type="text" value="12,039"/>
February <input type="text" value="682.1"/>	TDV(kWh) per Site	<input type="text" value="179,187"/>
March <input type="text" value="912.4"/>	NSHP Incentive per Site	<input type="text" value="\$17,703"/>
April <input type="text" value="1030.1"/>		
May <input type="text" value="1275.6"/>		
June <input type="text" value="1356.2"/>		
July <input type="text" value="1381.5"/>	Application Total kW AC system size	<input type="text" value="7.32"/>
August <input type="text" value="1257.4"/>	Application Total Annual kWh	<input type="text" value="12,039"/>
September <input type="text" value="971.4"/>	Application Total TDV(kWh)	<input type="text" value="179,187"/>
October <input type="text" value="924.4"/>	Application Total NSHP Incentive	<input type="text" value="\$17,703"/>
November <input type="text" value="805.8"/>		
December <input type="text" value="725.4"/>		
Annual <input type="text" value="12,039"/>		

Base Incentive Rate for the Reference System \$2.50/W