



# P.V. BUSTER INTRODUCTION

By using our PV Buster Worksheet, you will be sure to get the information that you need from each installer in order to make an apples-to-apples comparison of their proposals and get the best deal for your Residential PV System. Here are some “technical” terms that you might need to understand in filling out the form:

**The CSI-EPBB Calculator -** The CSI-EPBB Calculator was developed by the state for its rebate program. Its primary goal is to calculate the rebate a homeowner or business would receive for a given solar photovoltaic system. It is a requirement that all installers use the calculator and submit a printout of the results with the rebate application. It can be found at [www.csi-epbb.com](http://www.csi-epbb.com) and it provides some key factors that can be used to compare proposals. These include:

**Annual kWh:** An estimate of how much electricity the system will produce in a year.

**CEC-AC Rating:** This is the Solar Panel DC<sub>PTC</sub> rating times the inverter efficiency.

**Incentive:** This is the rebate amount.

**Make sure that all installers provide the printout of the CSI – EPBB Calculator with their proposals. See the attached sample.**

**Roof Information -** The amount of electricity your pv system will produce is dependent on the facing direction (azimuth) of your roof, your roof pitch (or tilt – the angle from horizontal), and any shading on your roof. During a site visit, a good installer will go out onto your roof to determine the facing direction and pitch. If there is the potential for shading make sure they do a shading analysis at this time. This will impact your rebate.

**System Description -** The installer will recommend specific solar panels and inverter(s). Make sure you get the exact brand, model number, rating, and quantity. To get the state rebate these components must be on an approved list. The CSI-EPBB calculator has nice pull-down menus that you can use to check if the panels and inverter are on the list.

**System Cost -** Make sure that the installer provides an itemized list of all hardware (solar panels, inverter, mounting system, etc.), labor charges (design, installation, etc.), and other non – taxable charges (shipping, travel, permit). You must pay sales tax on the hardware but not on labor or the other charges. Double-check the sales tax. Make sure you know the total system cost before rebates and tax credits.

**CSI Incentive:** This should come from CSI-EPBB calculation sheet. This rebate decreases over time but the CSI-EPBB calculator will give the current rate.

**Federal Tax Credit:** The residential tax credit is 30% of the Total System Cost minus the State Rebate. If you have a home based business you may be illegible for additional federal tax credits, so check with your accountant. The current federal tax credits expire at the end of 2008.

Subtract the CSI Incentive and Federal Tax Credit from the Total System Cost to get the Net System Cost.

**System Performance -** Copy the CEC-AC Rating and PV Annual kWh from the CSI-EPBB Calculation sheet.

**Comparison Factors -** Get out your calculator and determine these two simple factors. These will provide an easy way to compare the systems recommended by the different installers.

# P.V. BUSTER WORKSHEET

## Home Information

Annual kWh you currently use \_\_\_\_\_

Facing Direction of your Roof \_\_\_\_\_

Roof Pitch \_\_\_\_\_

## System Description

	Brand	Model #	Rating (if available)	Number of Panels
PV Modules				
Inverter				

## System Cost

**A) Hardware Total** (pv modules, inverter, rail system, misc. electrical) \$ \_\_\_\_\_

**B) Labor Total** (system design, installation, etc.) ..... \$ \_\_\_\_\_

**C) Miscellaneous non-taxable** (delivery fees, permit fees, etc ) ..... \$ \_\_\_\_\_

**D) Sales Tax** ..... \$ \_\_\_\_\_

**E) Total System Cost** (A+B+C+D) ..... \$ \_\_\_\_\_

**F) CSI Incentive** (aka rebate, from CSI-EPBB Calculation Sheet) ..... \$ \_\_\_\_\_

**G) Federal Tax Credit** ( (E-F)\*.3 , maximum of \$2,000.) ..... \$ \_\_\_\_\_

**H) Net System Cost** ( E - F - G ) ..... \$ \_\_\_\_\_

## System Performance

**I) CEC-AC Rating** (from CSI-EPBB Calculation Sheet) ..... (kW)

**J) PV Annual kWh** (from CSI-EPBB Calculation Sheet) ..... (kWh)