

# Is Solar Worth It? A Home buyer's worksheet (APS)

Is the cost of solar electricity cheaper or more expensive than the cost of utility provided electricity. Use this form to find out.

| Basic system details    |   |  |
|-------------------------|---|--|
| Solar Type:             | <input type="checkbox"/> Leased<br><input type="checkbox"/> Prepaid Lease<br><input type="checkbox"/> Owned w/ loan payments<br><input type="checkbox"/> Owned free and clear | Solar leases are not a fixture to the home and have a monthly payment. Prepaid solar leases are leased solar systems where the seller paid all of the payments upfront. Owned solar is a fixture on the home. If there is not a loan being assumed by the buyer, the system should be free and clear of liens. |
| System Size (kW)        | kW  | Usually found in the lease or purchase documents   |
| Annual production (kWh) | kWh   | Usually found in the lease documents or can be estimated at <a href="http://www.PVWatts.com">http://www.PVWatts.com</a>  |
| Monthly cost of solar   | \$  | Monthly solar lease or loan payment  |
| Annual cost of solar    | \$  | Monthly solar payment x 12   |
| <b>COST PER KWH</b>     | \$  | Annual cost of solar divided by annual production. Compare this number to the <b>cost of electricity</b> to determine how cost effective the solar is.   |

| Cost of electricity per kWh |  |  |  |               |
|-----------------------------|--|--|--|---------------|
| Rate plan                   | ET-1 (9am/9pm)                                 | ET-2 (12pm-7pm)                                | Saver Choice (3pm-8pm)                         | Standard Rate |
| Cost Off Peak/On Peak:      | \$0.067 / \$0.207 (S)<br>\$0.064 / \$0.168 (W) | \$0.071 / \$0.282 (S)<br>\$0.070 / \$0.229 (W) | \$0.109 / \$0.243 (S)<br>\$0.109 / \$0.231 (W) | \$0.112 (min) |

| Other factors to consider |          |   |
|---------------------------|----------|---|
| Avg monthly utility bill  | \$       | Ask seller for a 12 month utility history   |
| Highest utility bill:     | \$       |   |
| Lowest utility bill:      | \$       |   |
| Is there net-metering?    | YES / NO | Net metering allows the customer to roll over energy credits month to month in order to use them throughout the year. Look for EPR-6 code on the utility bills. |
| Age of solar panels       |          | Solar panels typically have a 20 to 25 year warranty  |
| Age of inverter(s)        |          | Large inverters installed have a life expectancy of around 10 years. Micro inverters installed on each solar panel should last the life of the panel.           |
| Estimated value of solar  | \$       | Estimates can be found at <a href="http://www.PVValue.com">http://www.PVValue.com</a>   |

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Instructions on use:

This worksheet is designed to give you a basic look at the benefit that a solar system adds to a home. Look at the cost per kilowatt (kWh) in comparison to the cost of purchasing the same electricity from the utility. Is it higher or lower?

**Basic system details** section is designed to give you an overview of what the solar system is capable of providing you each year. The main factors to look at here is how much electricity will the solar system produce (annual production as stated in kilowatt hours or kWh) and the cost of each kilowatt hour.

**Annual production** reflects how much power you will NOT need from the utility company. It is possible to produce more electricity from your solar panels than you will need in a year. Furthermore if the current rate plan is a time of use plan (i.e. 9am-9pm, 12pm-7pm, or the 3pm-8pm), APS will only offset the home owner for electricity generated during on peak hours for on peak usage/charges while electricity generated off peak will only offset energy usage/charges during off peak hours. With this in mind, it is possible to over produce the needed electricity during on peak hours while not producing enough electricity during off peak hours and incurring additional generation charges from the utility company.

The **cost per kWh** reflects the cost to generate the electricity from the solar panels. Solar leases can cost anywhere from \$0.07 to \$0.15 on average. Prepaid solar leases or solar owned systems that do not have a loan to be assumed by the home buyer should have a cost per kWh of \$0.00 (i.e. free electricity). Cost per kWh does not reflect any future costs by the home owner such as replacement costs for an inverter for example.

**Cost of Electricity section** reflects the most common rate plans associated with solar in the Phoenix area. If you have a copy of the seller's utility bills, the rate plan can be found on the breakdown of charges page, usually at the top of the page. Saver Choice rate plan does not include the super off-peak charges during the winter time from 10am to 3pm. Standard rate plan does not include all tiers of usage.

The **Other factors to consider section** reflect other material information to consider when deciding to buy a solar home. Homes that have grand-fathered rate plans such as the Standard Rate, ET-1 and ET-2, should have been eligible for net metering when the system was installed. Look for the EPR-6 code next to the rate plan on the seller's utility bill. Absent of net metering, the seller may have net billing instead. Net billing zeros out the additional energy credits produced by the solar system each month and does not roll over each month to be used throughout the year as needed.

Estimate value of solar reflects the value that the solar system should add to an appraisal if done properly. Estimates of value can be found online at <http://www.pvvalue.com/>, a website endorsed by the Appraisal Institute to be used by appraisers when comparable sales are absent. Solar should only add value if it is a fixture of the home and not leased (even if it is a prepaid lease).

This worksheet is designed to be informative but not authoritative. Home buyers purchasing a home should consult the proper legal, tax and solar advisors to make a proper determination if the solar on a home they are considering to purchase is worth the assumption of payments and use.