

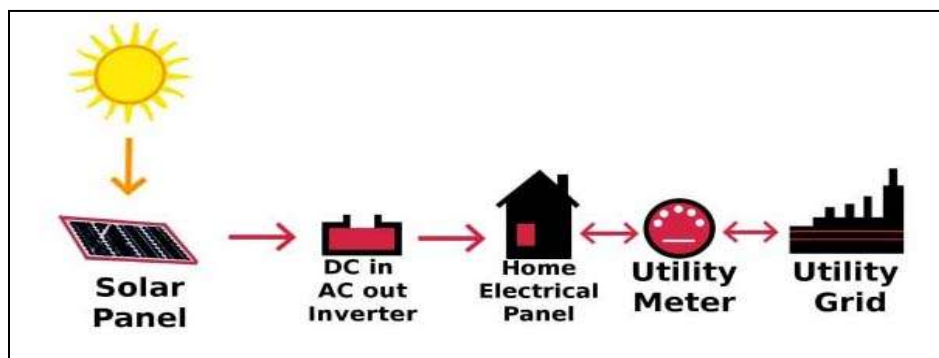


## Valley Brook Solar Power

The solar power systems for the Valley Brook residences are solar electric, or photovoltaic (PV) systems which help offset the electric bill of the home. The systems are either a 2.1 kilowatt (kW) size or a 1.575 kW size depending on the available roof space for each of the units. The systems are maintenance free and each system will have an inverter located in the garage that will display how much power the system has made in the past day or since it was installed. It can also display information such as the amount of CO2 emissions the system has saved or the amount of money that has been saved due to the power produced by the solar.

### How Does it Work?

The PV systems are all “grid-tied” which means they are connected to Xcel Energy utility lines. Living with a grid-tied PV system is no different than living with grid power. When the sun is shining the photovoltaic (PV) system creates a higher voltage than the utility feed into the house. Therefore, any demand from the house is first met by the solar energy when it’s available. If the solar power is not available, like at nighttime, then the house demand is met by the grid. If there is no demand within the home and solar power is available, it is fed to the utility through the bi-directional meter which counts the kilowatt-hours generated and banks them for later use. The PV system will shut down when the grid does in order to protect anyone working on the power lines.



### Federal Tax Credit (to be used by the homeowner)

*The Energy Improvement and Extension Act of 2008* (H.R. 1424) allows a taxpayer to claim a credit of 30% of qualified expenditures for a renewable energy generation system that serves a dwelling unit located in the U.S. used as a residence by the taxpayer. The tax credit can be applied against the alternative minimum tax. If the federal tax credit exceeds tax liability, the excess amount may be carried forward to the succeeding taxable year. Systems must be placed in service from January 1, 2006, through December 31, 2016. A trusted tax professional should be consulted for specific application of the tax credit to your individual situation. Additional details can be found at: [www.dsireusa.org](http://www.dsireusa.org) (the Database of State and Federal Incentives for Renewables and Efficiency).

Innovative Energy helps people save money every month while leading the way in environmental stewardship. We provide solar and wind power systems you can trust to perform and last. Innovative Energy has been serving the mountain communities of Colorado since 1992 and understands the unique challenges of designing systems for the high alpine environment. Our work includes systems for existing homes, new homes, off-grid homes and ranches, commercial buildings, and government buildings. **Contact Innovative Energy at 970.453.5384 or [info@renewablepower.com](mailto:info@renewablepower.com).**

\*See photos of other PV systems installed by Innovative Energy at [www.renewablepower.com/2009/See\\_Projects.html](http://www.renewablepower.com/2009/See_Projects.html)\*