

Homes Powered By Solar

Solar power for homes has truly come a very long way since the early, boxy design of solar panels that most of us have seen. Great advances have been made with respect to solar cell construction which allow a variety of building materials be made with the solar cells incorporated into the design, thus effectively making them almost undetectable.

Solar power for homes can be generated using one of two methods. An off the grid system is not connected to your utility company electricity supply and has to meet all of your home's needs. It usually has another backup system and will store current in a battery bank for use at night. The other form is on the grid or net metering. It is still connected to the utility company and can either be used as a supplemental system or if you create enough electricity it can be sold back to the utility company.

The basic components to generate solar power for homes are the same whether you opt for a standalone system or a supplemental system. The key component is the photovoltaic panels, commonly known as PV cells or solar panels, these panels are lined with a semi conductor or solar cell that turns the rays of the sun into electricity. This electricity is then routed into a regulator/controller that keeps the current at the voltage/amperage level your system is designed for. The electricity is then routed either into your homes electrical system or into a battery array or storage system that will keep that solar power available when the sun goes down.

Installing a storage system has its pluses even if you're connected to the grid. Your monthly utility bill will still be less than what you would pay for full service from the power company, but you'll also have access to power in the event of any outages.

Augmenting or altogether replacing your power requirements with solar power for homes has never been simpler or more cost-effective than it is right now. There are new building materials include roofing material, car port roofing, awnings, and even the edges of your window-panes that contain solar cells. These types of solar panels are known as Building Integrated Photovoltaics. The application of the roofing materials not only serves as solar panels, they also provide for the same degree of protection as regular asphalt shingles.

One of the greatest obstacles to using solar power for homes has traditionally been the up-front expense. Now, however, there are avenues to offsetting that expense. Government grants are available which go a long way toward subsidizing your household's conversion to solar power. Federal rebates for solar power installations can vary year from year, and each state that offers one has its own incentives ranging from additional rebates to offering low-interest rates to finance green projects.

Aside from reducing your home's environmental impact, perhaps one of the greenest returns you will see will be in your utility bill which you can reduce or eliminate through the use of solar power for homes. Most utility companies even have a metering program that enables you to sell the excess power generated by your solar power system to the utility company, now how's that for green! Net metering is a good idea in terms of environmental impact because it gives individuals an incentive to sell their electricity to the power companies which can then be sold to other users. This can reduce the power companies reliance on fossil fuels that are thought to cause many of the environmental problems we currently face.

About the Author

For details on [earth for energy](#), a way to make solar and wind energy at home then visit <http://www.solarpowerappliances.com>.

Source: <http://www.thinkgreenarticles.com>