

Tim Grahl



Chesapeake Solar
a groSolar company

**7761 Waterloo Rd.
Jessup MD, 20794
443-451-3516**

Who We Are

Chesapeake Solar, a groSolar Company specializes in the turnkey design and installation of Solar Photovoltaic (PV) electric & Solar Hot Water systems.

Acquired by groSolar in July 2008. groSolar is one of the nation's largest solar energy providers based in Vermont. Allows us to better meet the incredible growth of the solar industry in the mid-Atlantic region.

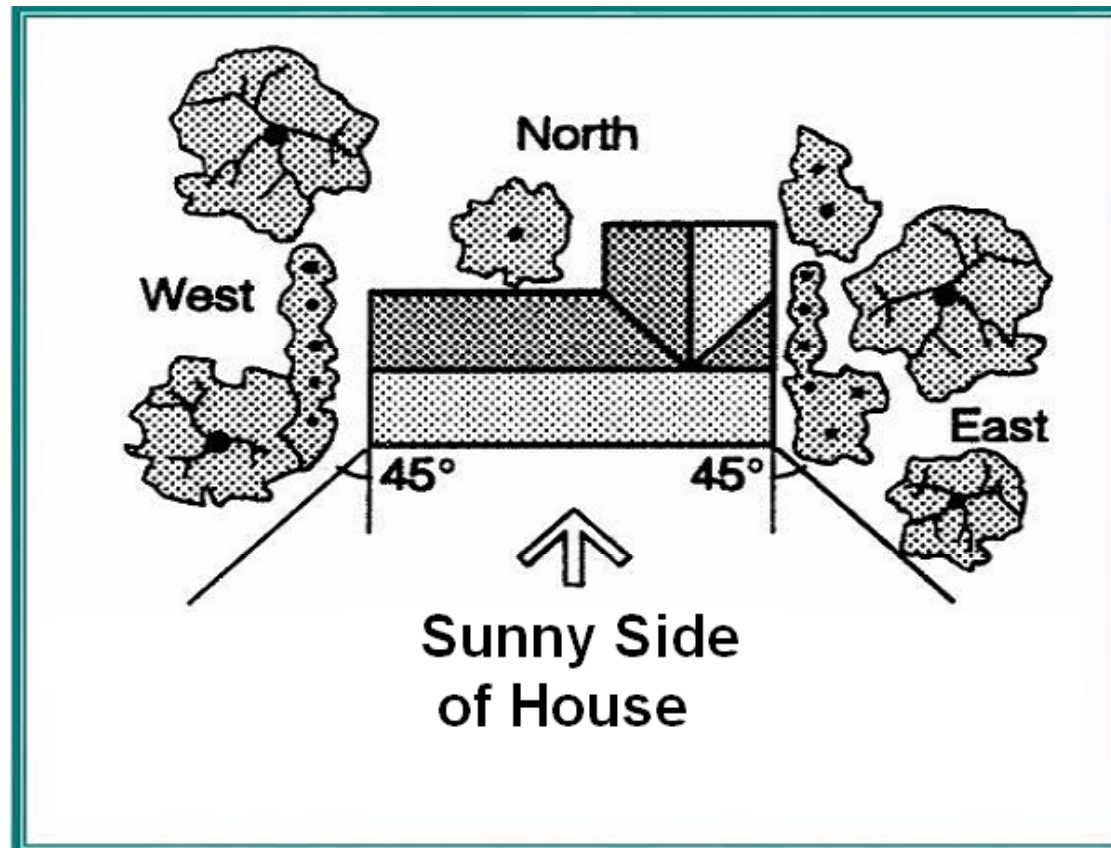


Why Chesapeake Solar

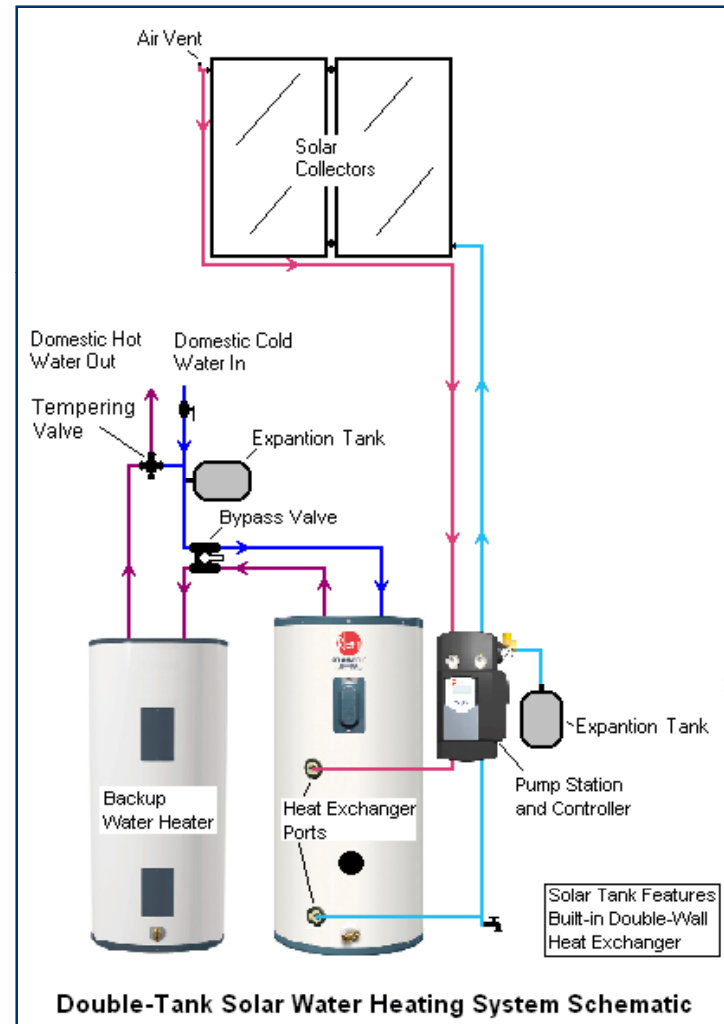
- Industry leader in the Mid-Atlantic region with 10 years of experience
- Staff includes licensed professional engineers and NABCEP certified installers
- All systems are customized to ensure a well-designed, efficient, productive system for each unique site
- All systems are warranted for design and installation on top of the extensive manufacturer warranty



Good Solar Orientation



Basic System Schematic



Solar Hot Water System in Rockville, MD



Solar Hot Water System in Crownsville, MD



Incentives for Solar Water Heating

Federal Income Tax Credit

- 30% of the cost of a solar water-heating system.

Maryland Grant Program

- Projected value of 30% up to \$2,500. A waiting list currently exists.

Montgomery County Property Tax Credit

- The lesser of \$1,500 or 50% of the cost of a solar water-heating system

<http://www.dsireusa.org>

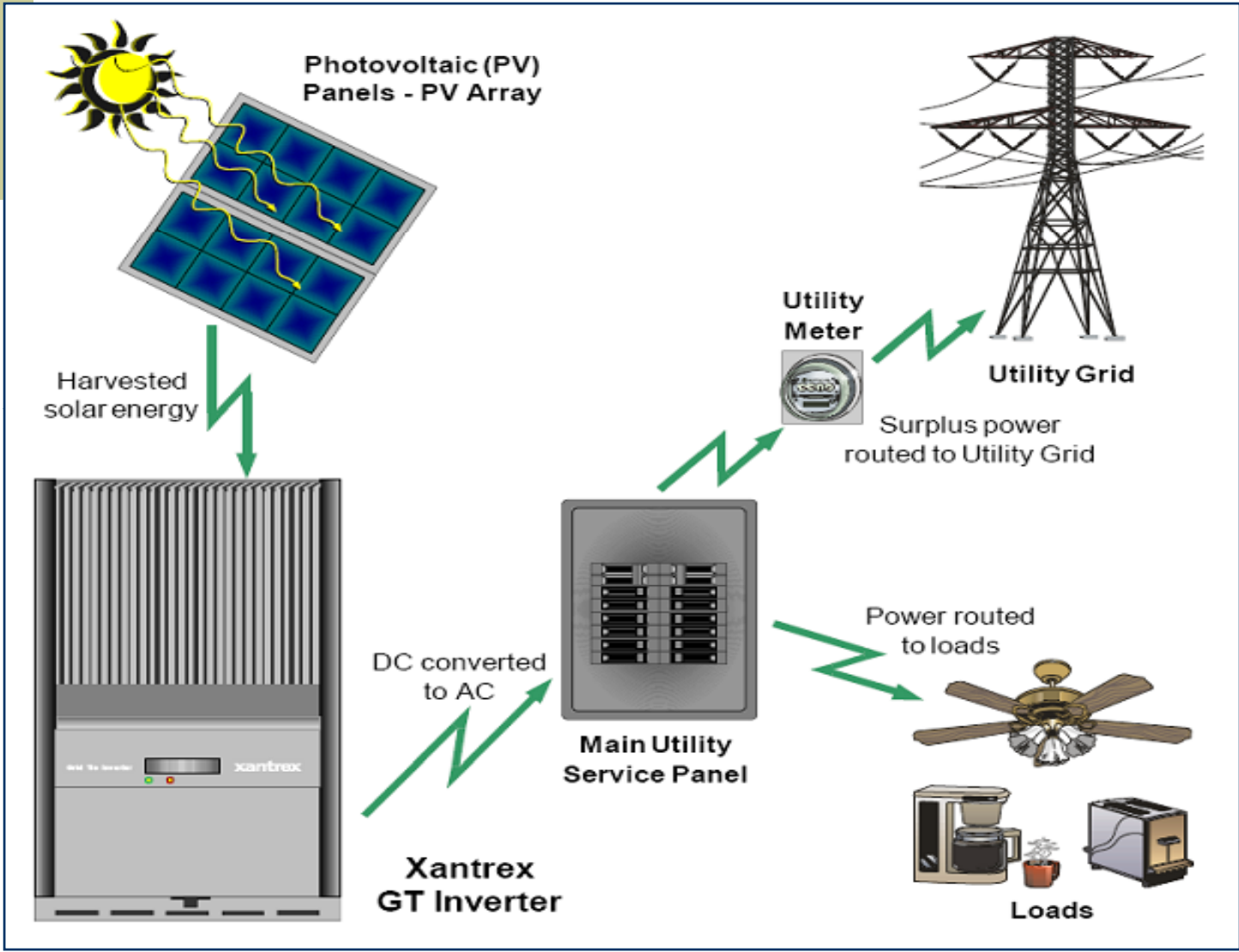


The Economics of Solar Water Heating

For a 4-person System Off-setting Electricity

Montgomery Co.

Energy offset:	60-80% of current hot water energy.
Average installed cost:	\$9,000
Value of MEA Grant (Est.):	\$2,500
Value of Howard County PTC:	\$1,500
Value of Fed'l Tax Credit:	<u>\$2,700</u>
Total value of incentives:	\$6,700
Ave. Net Cost after Incentives:	\$2,300





Solar PV and Hot Water system

Woodstock, MD



5.4kW Solar PV system

Bozman, MD

Basic System Information

System Size	# of Modules	Roof Space	Avg. kWh/month	% offset of 1,500 kWh/month bill	Avg. Installed Gross Cost
2 kW	10 Modules	180SF	200-220 kWh	14%	\$18,000-20,000
3 kW	16 Modules	270SF	300-330 kWh	21%	\$25,000-27,000
4 kW	22 Modules	360SF	400-440 kWh	28%	\$33,000-35,000



Incentives for Solar PV

Solar Renewable Energy Credits (SREC's):

- Equivalent to ~\$1.40/watt

Federal Income Tax Credit

- 30% of the cost of a solar PV power system

Maryland Grant Program

- Projected value ~\$1,250/kW. Currently a waiting list exists.

Montgomery County Property Tax Credit

- The lesser of \$5,000 or 50% of the cost of a solar PV system

<http://www.dsireusa.org>



The Economics of Photovoltaic's

A 4 kW system with good sun exposure

Montgomery Co

Energy offset:	5,040 kWh/yr
Value of solar energy:	\$756/yr
Ave. Initial cost of system:	\$34,000
Value of MEA Grant (Est.):	\$5,000
Value of County PTC:	\$5,000
Value of SREC's:	\$5,600
Value of fed. tax credit:	<u>\$10,200</u>
Total value incentives:	\$25,800
Total cost after incentives:	\$8,200

Reasons for Choosing a Solar Energy System

- The sun's energy is free to harvest
- Reduces vulnerability to fuel price hikes
- 25+ year life
- Very low maintenance
- Solar systems enhance the value of your property
- Grants and tax credits reduce upfront cost
- You actively contribute to environmental protection



What are the environmental benefits of PV?

- ◆ PV energy displaces coal, natural gas, oil and nuclear and creates:
 - no environmental damage from fuel extraction
 - no byproducts
 - no radioactive waste
 - no air pollution (particulates, SO_x, NO_x, mercury, etc)
 - no noise pollution
 - no greenhouse gases (CO₂)and
 - and no threats to public health
- ◆ Every year, each kW of installed PV will offset 2,503lbs of carbon dioxide, 5.9 lbs of nitrogen oxide, and 14.6 lbs of sulfite. This is the equivalent of planting ½ acre of trees or taking 1 car off the road.

Community Discounts

- 5-9 Systems = \$500 discount per installed system.
- 10+ System = \$750 discount per installed system.



How can I move forward?

- Discuss your project with one of our sales representatives.
- Schedule a site evaluation.
- Apply for grant & receive confirmation.
- Installation of system.

