



2009

ECOsmarte NEXT GEN

Grid Tie In System



Builder Program
ECOsmart Green Building Products
1/1/2009

The ECOsarte NEXT GEN Solar Power Pool System will not only run your swimming pool and ECOsarte purifier without a carbon footprint, it has been engineered in such a manner that it may be upgraded to whole house capability with additional panels or a tie in with “bird friendly” vertical axis wind generators (below).



In many states your personal pool, or whole-house grid tie in system will be FREE by simply following your factory assisted REBATE procedure. For example, Minnesota and California offer up to \$13,000 should you decide to expand your system up front or anytime within the first 60 days of your Beta site purchase.

ECOsarte NEXT Gen customers will be receiving their Builder product for as little as \$4 per watt, *before* 30% Federal Tax Credit, individual state credits, rebates from municipality, and local utility providers calculated up to \$2.25 per watt.

ECOsarte is in the process of getting each reseller/installer certified as a PV solar approved technician for their state. In addition, all components provided by ECOsarte will be those approved by the nation’s most stringent code of acceptance, that of the state of California.

To ensure maximum tax credit and rebates, ECOsarte will be installing a grid tie system, upgradeable to a full 5KW whole house configuration simply by purchasing 16 panels and paying \$3,940 to upgrade their 2,000 watt inverter to a 5,000 watt inverter. All of these costs are recoverable by cash rebate and tax credit when a dealer purchases the product at wholesale.

Some customers, particularly those with larger lots may wish to purchase the inverter upgrade and wait for due diligence on the ECOsarte hybrid wind generator sites to prove themselves, particularly those with the silent, vertical generators that mount on roof tops. Those generators may offer 1-4 KW on cloudy days when solar output falls. The obtuse appearance of 18-36’ blades and noise associated with the conventional horizontal generators will not likely be an issue on larger estates or rural ECOsarte Beta sites and will be compatible with the UL1714 listed power inverters that come standard with your solar Beta site. Before installation, the homeowner or installer will be required to obtain a separate building permit.



Site Survey: Pre-Install

Pool Setup

- Pump Size (circle one): 1hp 1.5hp 2hp Variable speed
 - Make (Pentair, Hayward etc...) _____
- Filter Type: Sand Glass D.E. Cartridge
 - Size _____lbs./sq.ft. (DE/Cart)
- Make (Pentair, Hayward etc...) _____
- Heater Type (circle one): Solar Nat. Gas Heat Gas Heat Pmp. Elec.

Internal House Info

- Average # of People in Home: _____
- # of Computers: _____
- # of Televisions: _____
- Dishwater Heat Control? Y or N
- # of Washer/ Dryer _____
- #of Bedrooms _____
- Size of House _____sq.ft.
- Max KW on 2008 Energy Bill _____KW
- Total KW hours/Yr. _____
- Elec. Panel Location (circle one) Garage Det. Garage Basement

Panel Installation Preference

(all options must face south)

- ☐ Ground Install
- ☐ Mount Install (i.e. Gazebo Roof, Fence etc...) 400ft. Required
- ☐ Roof Install (Estimated Footage: _____ft.) 400ft. Required
- ☐ Combination (Estimated Footage: _____ft.) Hybrid
- ☐ Rotating Sensor on Pole Mount Desired

**Pole Mounts will increase installation cost \$900 to \$4,000, rotating mechanism quoted*

Your ECOsmarte NEXT GEN Package will contain the specific hardware and DC voltage cable to complete the project. A total of 24 39"x 59" panels will be used.

An example of a ground mount grid tie system (right)

Ground Mount



Roof Mount

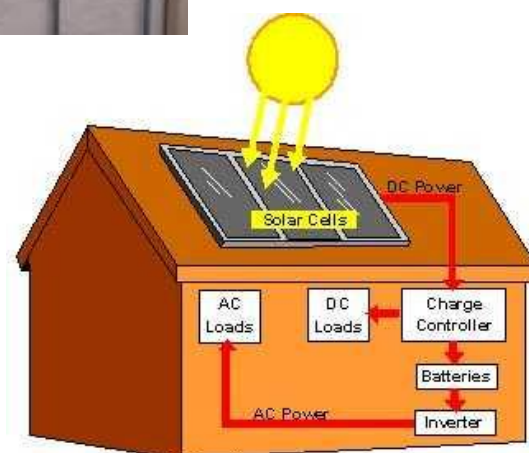
An example of a combination roof/gazebo mount (right) This setup will install for the same price on both the ground and roof configurations.



Pole Mount



*must not be obstructed by shade



Pictured on the right is an example of a Pole Mount Grid Tie System; an upgrade to this setup will be available to anyone for an additional cost.

Each ECOsmarte NEXT GEN System will utilize an inverter, like the one pictured to the right, to convert DC voltage from the solar panels to usable AC. Your local utility will furnish a “reverse spin” meter at no charge allowing you to sell power in the day and buy power at night.

Each project comes with a Tyco Solarlok kit that contains enough low voltage wire to reach you main panel

**2hr. back-up power on a 5KW system can be achieved by running a separate Diesel/Biodiesel/Propane generator with available switch-plug tie in.*



These are renderings of the new ECOsmarte Green Building Center which will be powered by an array of fifty 200 watt solar panels and an 80ft. collapsible wind generator. The new building will run entirely on renewable energy and rainwater.

*note: Wind Generators require 9mph of wind at 80ft.



Located on I494 at the MSP Airport and Mall of America, the ECOsmarte Green Building Center has three free hotel rooms scheduled to open in late 2009 to demonstrate our sustainable products.