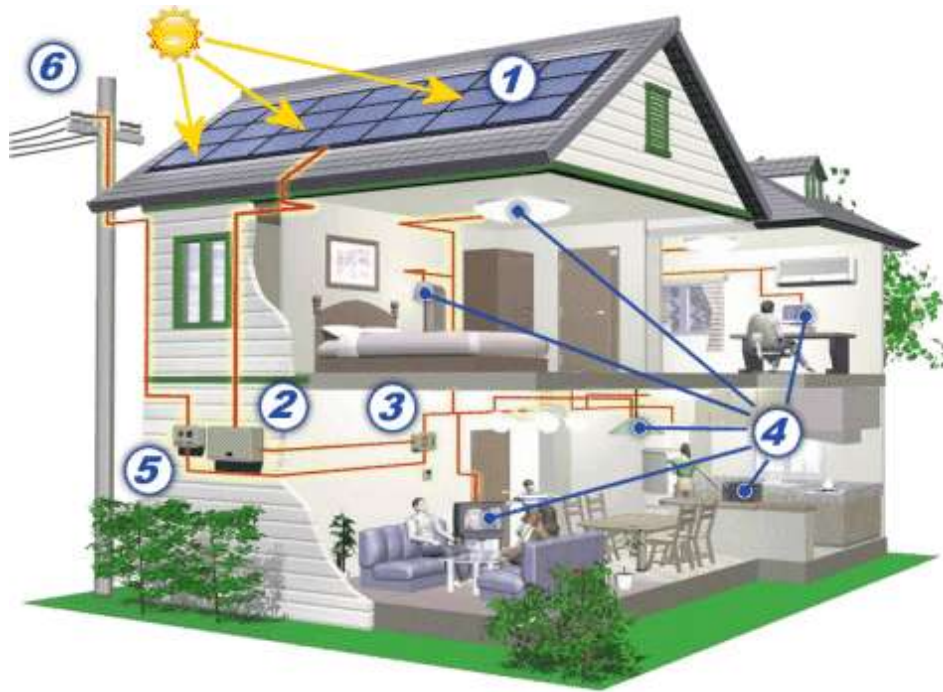


How Solar Photovoltaic Works



1	Solar Panels	Solar photovoltaic panels collect the sun energy and convert it into an electric DC current. An array is a group of solar panels to reach your energy needs.
2	Inverter	DC to AC inverters convert the DC current generated by a solar panel into AC current that can be used to power appliances in your home or business.
3	Distribution Panel	This is the panel that feeds the home or business circuits to your appliances. Often a subpanel is used to power only critical loads.
4	AC loads	These are your current loads; lights, appliances such as TV, microwave, pumps, refrigerator, freezer, etc.
5	Electric Meter	Your home solar power system can actually cause your electric meter to spin backwards as it feeds the electricity it generates into the main power grid and you earn credit on your electric bill.
6	Main Power Grid	Electricity generated by your solar power system is directed onto the power grid. It might generate excess electricity and sell it to your power company.

Installations must comply with local electrical and construction codes. It will require adequate wiring, combiner boxes, DC and AC disconnects, fuse box, and proper labeling. Your system can optionally have a battery system for backup during power interruptions and for remote applications. This requires a different inverter for grid tie with backup or hybrid application.



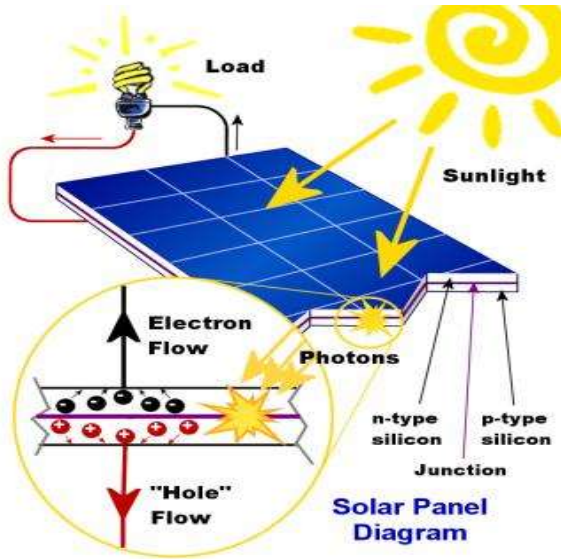
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▪ PO Box 3062 ▪ Aguadilla, PR 00605



SOLAR PHOTOVOLTAIC ENERGY, endless source of energy.

Solar Energy forms at the Sun when hydrogen atoms combine to form heavier helium atoms. In the process, part is converted in helium and part in solar radiation. This luminance radiation is radiated in all directions and strikes the Earth with near 1000 Watts per square meter, with enough power to meet all our electrical needs.



Solar photovoltaic converts the light spectrum of solar energy into producing electricity. When sun light strikes the solar cell, provokes a movement of electrons that then properly routed produced electric current.

Photovoltaic cells are mostly made of silicon. They are gathered to form a module or panels to produce more electricity. These modules are then interconnected to meet different electric performances.

Solar Energy is one of the cleanest, does not produce contamination or negative environment effects, such as noise and toxic emissions. Solar energy can be stored in batteries for use during night or cloudy days. In system connected to the grid without batteries, photovoltaic can produce excess energy and send it to the distribution lines, this runs the meter backward and the stored energy can be used at night to meet partial of all your energy needs.

We invite you to visit our website and review this and other educational documents.

[Reasons to Go Solar](#)

[Frequently Asked Questions](#)

[Glossary of Terms](#)

[How to Calculate your Solar PV System](#)

[Tips to Save Energy](#)

[LEEDership \(Green Building Concepts\)](#)



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