

Why Choose Solar Power for your Home or Business?



SOLAR POWER REDUCES ELECTRICITY BILLS

The Philippines has one of the highest electricity rates in Asia. By installing a Solar Power system you can eliminate or significantly reduce your monthly electric utility bill. The cost of electricity from the utility is getting higher every day, and will only continue to rise. But by generating your own power with solar, you can stabilize your cost of electricity and even reduce its sensitivity to future rate hikes.



SOLAR POWER IS GOOD FOR THE PLANET!

Whether you're committed to helping fight global warming by reducing your own CO2 emissions, or looking for ways to get control over your increasing utility bill, solar offers a solution with benefits for all.



SOLAR POWER SYSTEMS INCREASE PROPERTY VALUE

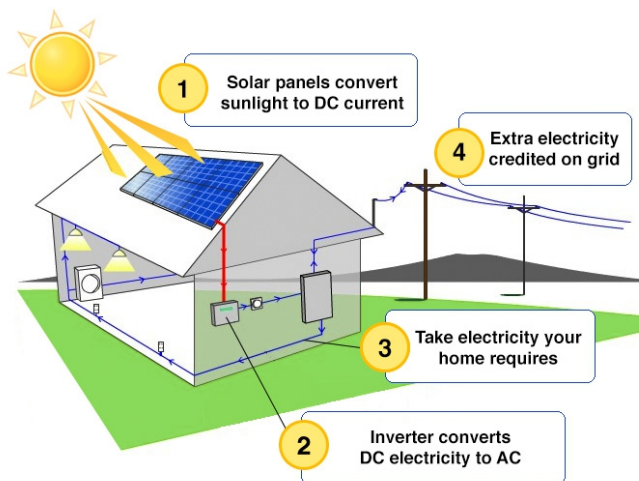
Studies have indicated that homes with solar systems sold at a greater price point than homes without such systems. The price premium you will get for the solar system may recoup much of the original capital investment.



SOLAR POWER IS A SMART BUSINESS DECISION

A solar energy system is a smart option for businesses. Solar panels reduce the amount of electricity coming from fossil fuels, supplying business operations with clean, green and renewable energy. Many business owners, from resorts to heavy industries to retail stores are making the decision to reduce their electricity bills and go solar today.

How Solar Power Works?



Solar modules capture the light from the sun, and through the photo-voltaic properties of the panels the light is converted into electricity. The conversion takes place within the specially fabricated semiconductor crystals comprising the cells of the solar panels.

The electricity produced however is DC power which we need to convert into usable AC power. The job of the inverter is to do just this. It transforms the raw DC power into 240 Volt AC electricity which is suitable for ordinary household needs.

What does "Grid Connected" mean?

Most homes select to install "grid-connected" Solar PV systems. This type of system has a number of great benefits, not only for the individual home-owner but for the community and environment at large. The systems are much cheaper to install and involve far less maintenance than "off-grid" systems. Generally speaking, off-grid systems are used in very remote locations where power is not available or where the grid is very unreliable.

The "grid" we are referring to of course is the physical connection that most residential homes and businesses have with their electricity providers. Those power-poles we're all so familiar with are an integral part of "the grid". By installing a "grid-connected" Solar System to your home you are not "unplugging" from the grid but you become for a part your own electricity generator.

The electricity you produce via your solar panels is used first and foremost in powering your own home. Its preferable to design the system as much as possible for 100% own use. You can apply for net metering, and in that case you can sell the excess of electricity back to the DU.

SOLAR POWER SYSTEM



BEFORE YOU CONTACT US:

Below is a selection of commonly asked-for information, as well as information we need in order to provide consultation.

Basic Information:

- The highest efficiency of the panels can be reached when they point to the south in a 10 - 15 degree angle.
- Surface area needed is 7 square meter per KW peak
- Dimension of our current panels (340 Watt poly panels) is 992 mm x 1956 mm
- Dimension of our current panels (445 Watt mono panels) is 1052 mm x 2115 mm

- Weight of the panels is 23~24 kg
- 1 KW peak produces around 3.5~5 KW per day (in the year average)
- Avoid shadow on the panels
- The return of investment is around 5 years for grid systems
- Panels and mounting structures have a 10 year warranty (25 years performance 80%)
- Inverters have a 4~5 year warranty

Information we need:

- How much roof top space is available
- What kind of roof is it (flat roof or not, structure, type of surface material, etc)
- What kind of electrical system you have (2 phase or 3 phase, 230 Volts or 400 Volts)
- How much you pay per KW (important for ROI simulation)
- Your actual electricity bill
- Your consumption in daytime (8am - 5pm)

We can provide grid tied systems, off grid systems as well as hybrid systems, depending on the location, the availability of electricity, brownout situation or special customer wishes. Grid tied systems cover your daytime consumption. Perfect for facilities that use energy at daytime when the electricity is produced, like restaurants, bars, schools, offices etc.

If we know your electricity consumption during the day, we will be able to design a system that suits your individual needs best.

A major benefit of utilizing a Solar Power System, is that it can grow with you. As your power needs **increase, you can simply add more capacity to your existing system.**

Solar Energy Systems

Item	Device Power(W)	Working time(Hour)	Device Qty	Total power=p*t*Qty (Wh)
Refrigerator	125	24	2	6000
Iron	1600	1	2	3200
Electrical Stove	2000	2	1	4000
Television	100	6	8	4800
Washing Machine	160	1	2	320

Dryer	1000	1	2	2000
Air conditioner(18k)	1400	10	8	112000
Electrical Oven	1500	2	1	3000
TOTAL				135320

We take: 1 KW peak produces around 4 KW per day (in the year average)

That means we will need $135320/4=33830W$ solar system

Based on this requirement, we will recommend a system as below:

SERIAL NO.	GOODS DESCRIPTION	QUANTITY
1	Solar Energy System	
2	33KW ON GRID	
3	33KW INVERTER (THREE PHASE) + WIFI MONITOR	1
4	340W POLY SOLAR PV (5 BB LINE)	100
5	SOLAR PANEL RACK (NEER RUST AL.ALLOY)	1
6	6MM2 Solar Cable & MC4	2
7	MC4 + TOOL BAG	1

Drop your email at info@riwatt.com, or call/whatsapp at: +86 80 0660 1051 with more details!

