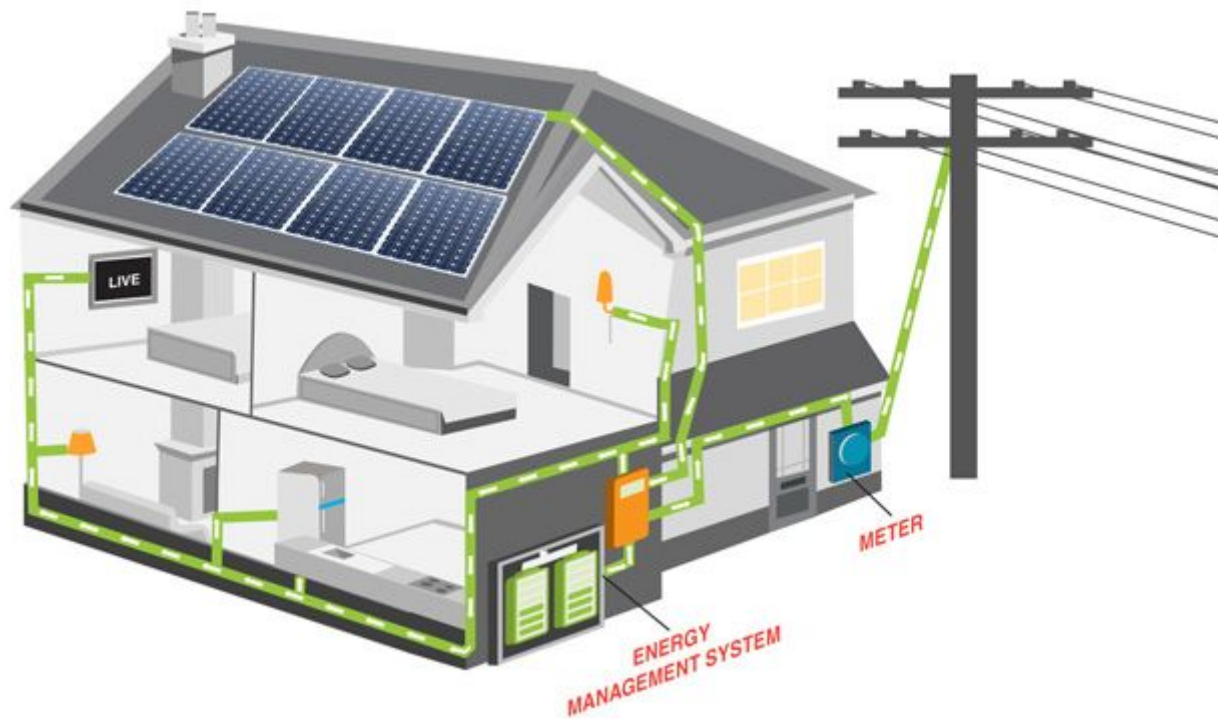


## Grid Connected Energy Storage–New Install

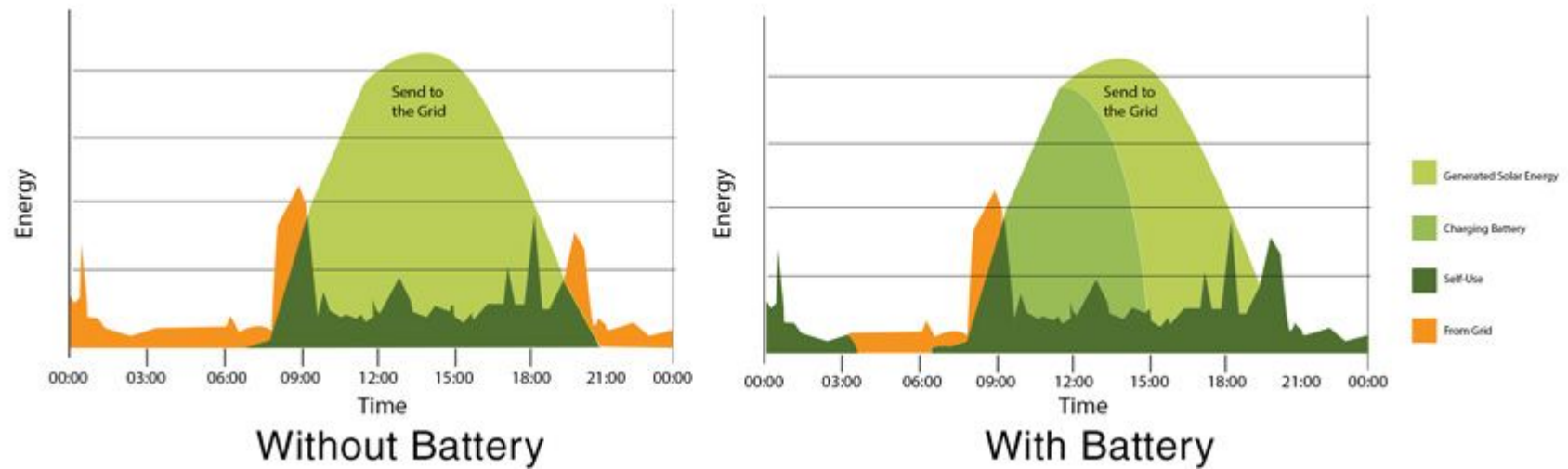
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Solar Grid connected Energy Storage System is a mini Solar power plant that can generate electricity from Solar power and store it for later use. It includes a solar panel array , an Energy management system and a battery bank.

## How Does it Work?

Solar Grid connected Energy Storage System converts DC electricity generated by solar panels to AC electricity for grid and load to DC for the battery. **The electricity will be provided for load first, and the excessive electricity will be stored in the battery, after the battery is fully charged, the electricity will be fed into the grid.** Once the power goes down, the inverter will activate the Emergency Power Supply (EPS) to ensure the energy from the panels and batteries can be used to power the home.



## Other Benefits

- Black outs – you will never run out of power
- Can charge using Off peak power and use at during peak hours
- 
- Hybrid Solar Systems give you the best of both worlds. This is a combination of the benefits found within both the On-Grid and Off-Grid Solar Systems. Their benefits include:

- 
- Being able to store power for later use. This means that you are no longer charged by an electricity company after daylight hours
- Being able to export excess power back into the electricity network (grid). This allows you to make money by sending power back to the grid.
- Being able to get power from the grid should you ever need it.
- Being able to your stored power, even when there is a blackout.
- Massively reduced electricity bills

## OFF -GREID Power system



Off-grid power system supplies electricity to properties that are not connected to the Grid electricity network. These systems are often referred to as “**stand-alone power system**” (SAPS), or “**remote area power systems**” (RAPS).

These systems are independent power stations capable of powering a wide range of applications with dependable and reliable electricity that is no different to that supplied by the national electricity grid. Whether it be for a small, large new, existing home, a station, business or an entire community that depends on large diesel generators, **off-grid stands alone power systems** are the **reliable, clean, hassle free and cost competitive** answer!

### How Does It Work?

Stand alone power system supply electricity to properties that are not connected to the public electricity network.

Electricity generated by solar panels **either** directly powers your electrical loads **or** charges batteries via an **inverter/ charger controller**. At night, the inverter supplies the energy stored in the battery bank. When the sun comes up the next day, the cycle begins again.

There are two different ways of configuring a remote are power system; these are known as **AC-Coupling** and **DC-Coupling**,

each having their unique advantages. The configuration type will have an impact on the life expectancy, efficiency and flexibility of your system.

## Off-grid System Components

A stand alone power system consists of 4 core components:

- Solar Panels
- Battery Bank
- Energy Management System (Includes the Inverter Charger)
- Backup Generator (Optional)