



## **Alternative Power for Health Centres/Hospitals**

It is critical to have a constant power supply in a life saving facility like the hospital/health centre. It can most times be the difference between life and death of a patient, between a test result being ready or not, between a vaccine being good or going bad.

Surgical operations and child bearing procedures are examples of clinical activities that can go wrong if there is a power outage when such activities are on going. Patients take for granted that when they check into a hospital, that the lights won't suddenly turn off just as the surgeon is preparing to perform a delicate maneuver. Power issues is no small task even at a small medical center.

To guarantee constant power, a hospital's critical power supply and equipments must have a reliable constant source. Having an alternative source of constant power is a must.

We propose to use natural sources (sunlight and wind) to power essential loads in such a way that the power supply will be constant, reliable as well as renewable, since the sun is always there shining on us and wind blows.

With this system, even hospitals in remote and inaccessible areas where utility power is non existent, can still utilize power the same way as counterpart in areas with regular electricity can. Vaccines, drugs, bloods and other critical medications that need to be stored can be effectively stored in solar refrigerators where they can be pulled out and used whenever they are needed to save lives or for vaccination.

We also provide perimeter lighting that uses the same renewable energy to power street lights to light up the vicinity and provide visibility at night.

This system makes use of battery storage system that ensures that there is power even at night or during low wind periods.

### **Advantages**

1. Vaccines can be stored and used even in remote areas without electricity
2. Vaccines, drugs and other forms of medications will no longer go bad because of power outages
3. The cost of paying for utility bills is eliminated
4. Surgical operations and child bearing activities can now go on without fear of the utility going out in the critical stages of the exercises.
5. More lives will be touched by and saved if this system is adopted.
6. We will be contributing our quota to providing a clean environment.
7. Patient can move around the wards to the rest rooms even at night and still find their way there easily.



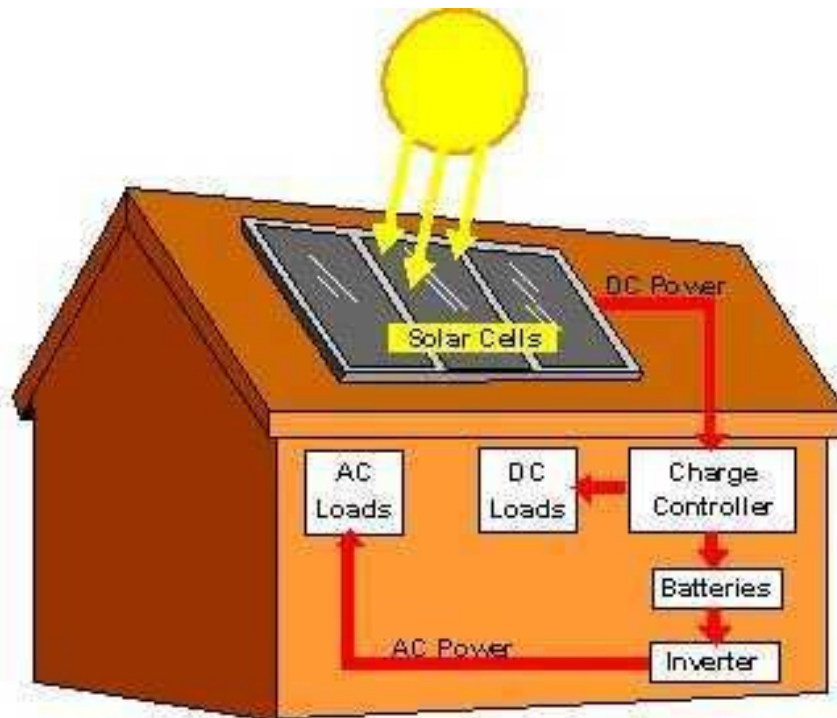
## System Description

Solar Panels and Wind Turbines provide the energy source

Controllers and inverters manage the power and convert into a usable form

Batteries store the power for when it is needed

The system is connected to existing wiring if present or we can handle the wiring for new centres



## How we work

To execute a project, we follow the following basic steps

1. Discuss project feasibility do agree on objectives and deliverables
2. Carry out site(s) visits
3. Do a n initial design
4. Generate a bill of quantity and cost the project
5. Send in costing for approval and agree on payment terms
6. Carry out final design, procure outsource equipment
7. Mobilise to site
8. Install and test
9. Demob