



[www.shirshenergy.com](http://www.shirshenergy.com)

**think green. live free.**

*We at Shirsh Energy believe in thinking green and living green so that our next generation have all the resources available that we enjoy in our lives. The demand for renewable energy is increasing as fossil fuels increase in price and concern grows about the economic and environmental impact.*

*Shirsh Energy's renewable energy services are customized to incorporate renewable technologies with energy efficiency strategies that provide our customers with long-term & sustainable solutions. It is a fact that India has a vast supply of renewable energy resources, and it has one of the largest programs in the world for deploying renewable energy products and systems, and so we have gamut of services offering exactly matching the needs of India's renewable energy demand.*

**EXPERTISE AND EXPERIENCE** - With 30 years of combined experience in erection and commissioning, we are capable to deal with the problems and challenges that a project may demand

**PROFESSIONALISM AND COMMITMENT TO EXCELLENCE** - In adherence to have best practices in Renewable energy solutions we assure our customers of timely deliveries each time and expected output.

**FOCUS ON SUSTAINABLE & RELIABLE DESIGN**- We have developed the standard design for each solution offering which have drastically reduced the cost of material requirements.

**INNOVATIVE SOLUTIONS TO LOWER THE COST OF INVESTMENTS:** We are utilizing the latest technology to design and develop our solutions such as Finite element analysis for wind & seismic load calculations as per IS875 and usage of best available material to assure the life of structures for more than 30 years.

**BEST SERVICES AT BEST PRICES** - With decreasing unit rates we provide you with Just the right price for each services for your information we have developed the seasonal structure at the price of static structure. To indicate we can deliver structure with commissioning within the range of 90 - 120 lacs/MW depending on Solar PV module used.

## Shirsh's Renewable Energy Solutions & Services Includes:



Off-Grid Solar (Home Made)  
solar photovoltaic (PV)  
electricity system integration



Solar water heating and  
pumping solutions



Solutions for telecom, hotels,  
hospitals, educational  
institutes, residential  
complex, agricultural & street  
lightings,



Grid tied solar photovoltaic  
structural Engineering,  
Procurement &  
Commissioning (EPC)



Solar house hold products &  
innovative products



Energy Auditing Services

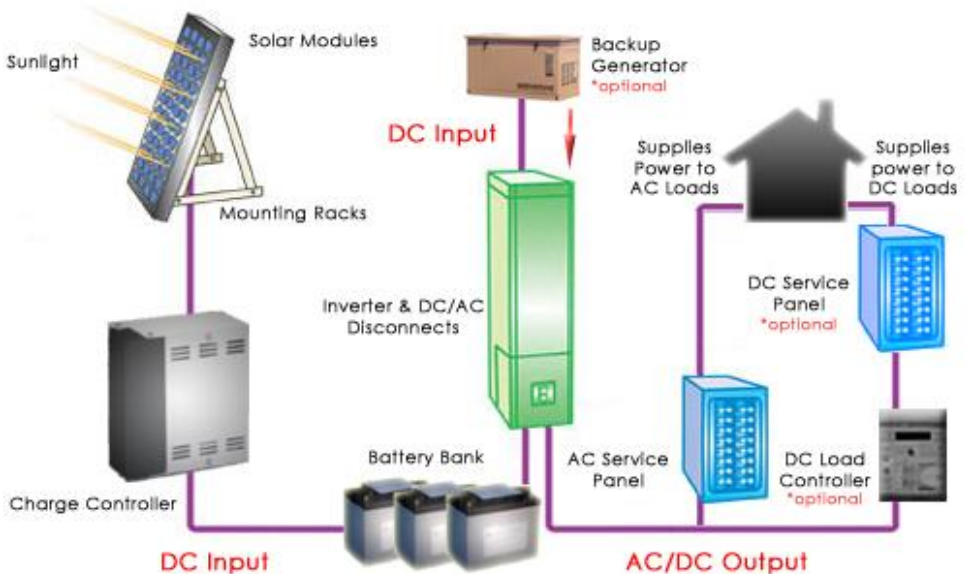
Please email your requirement to [info@shirshenergy.com](mailto:info@shirshenergy.com)

## OFF-GRID SOLAR (HOME MADE ) ELECTRICITY GENERATION

Living off the grid is a romantic ambition for some, a practical necessity for others. But whatever your motivation for off-grid living, cutting the electrical umbilical cord from the utility shouldn't be taken lightly.

A Solar Power energy system can be used by anyone to supply all their electrical needs, provide back-up power, or even just as a supplement to the normal electrical grid connection to a utility company. It is ideal for remote locations where power is unavailable or too expensive to hook-up to.

Below is the schematic overview of how you can make electricity from Sun and use it for your daily energy needs.



Make your dream home run on Solar Electricity with Shirsh Energy's Off-grid solar PV system integration. Moreover Government of India is also offering attractive incentives for going green. Call us today for more information at **91 250 6052 333/444/555/** or email at **info@shirshenergy.com**

## SOLUTION FOR INDUSTRIAL ELECTRICITY NEEDS

Shirsh Energy's unique solutions for industries like telecom, hotels, hospitals, educational institutes, residential complex, agricultural & street lightings .

### Our solutions includes

**Telecom :** All weather reliable solutions for remote telecom towers

**Oil and Gas :** Solutions for unmanned offshore platforms, well-heads and remote pipelines.

**Banks :** Solutions for ATMs in remote areas.

**Process Industries :** Solutions for processes where pre-heating is required, which can help save energy and costs.

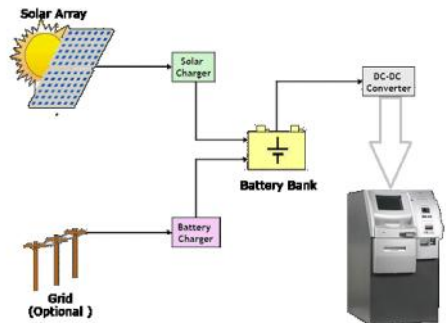
**Educational Institutes :** Solutions for educational institutes in remote areas where grid electricity is still a challenge, Shirsh energy's Off-grid solution help our next generation, so that they never learn in dark.

**Hotels & Malls :** Backup power and water heating are the two main requirement of these industry and we offer both of these solutions under one roof. With Shirsh Energy's off-grid applications you can now rely on Sun for your energy needs.

**Agriculture :** From water pumping to drying solutions we support our farmers to get there activities done faster with the equipments they were unable to use because of no electricity.



**SOLUTION FOR TELECOM TOWERS**



**SOLUTION FOR BANK ATM's**



**SOLAR CAR PARK**

# ON-GRID SOLAR PHOTOVOLTAIC STRUCTURAL EPC

## Structural and Component Supply

- Selection of roll formed steel all hot dip galvanized & aluminium section

## Solar PV Erection & Commissioning (EPC)

- To give energy producers the most technical solutions that the project may demand.

## SOLAR PV STRUCTURAL COMMISSIONING (EPC)

Shirsh energy can provide you with an economic and convenient mounting solutions that allows the installation of extensive open area plants in almost any landscape situation.

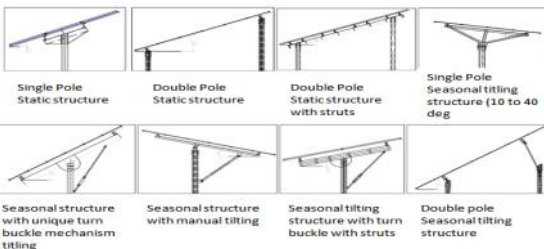
- State-of-the-art production facility for meeting simultaneous demands.
- Use of latest ramming machines for quick mounting of poles on site.
- Total EPC (Including Supply) of Solar structure cost estimated at 90-120 lacs/MW in period of 55-60 days depending on PV module selection.
- All galvanized steel or aluminum profile available optionally.
- Provision of seasonal tilting structure at the same cost of Static structure to sustain 200kmph wind load and to obtain additional 2-3% of power generation.
- Customized construction with adjustment options to equalize ground unevenness's. Cost-optimized complete construction based on structural optimization.

## Our Solar PV Mounting Structure EPC for On Grid Projects

- Design, Engineering, Drawings, marking at site
- Ramming/Piling of Poles
- Erection of Structures
- Fixing of PV Modules
- Electrical Cabling and earthing up to DC Panel
- Site management and miscellaneous activities

### Our installation in Gujrat

### Some of our Unique Design of Structure



# SOLAR POWERED HOUSEHOLD PRODUCTS

## Solar Photovoltaic Module (ELECSSL)



- Best quality solar cells with anti reflection coating for higher rate of absorption.
- Low iron tempered and anti reflective coating glass giving you higher rate of transmittance and more power.
- Triple layer back sheet which helps in excellent environmental release of dust, dirt, smog, etc.
- EVA with better shrinkage minimizing the power loss.
- 3 bypass diode, water-proof junction box of best in quality delivering high power output and minimized power loss.
- Best quality anodized aluminum frame provides high wind resistance and convenient mounting access.
- Solar modules are manufactured as per IEC-TUV and UL standards, with strict appearance check and performance test which guarantee the high quality standards.
- Suitable for grid connected systems.



## Solar Street Light System

- High Efficiency Solar Photovoltaic Modules for better output.
- Elegant & Robust Design.
- Electronic circuit designed with all protection - 100% Short circuit Protection.
- Easy to install & Maintain.
- Automatic dusk to dawn operation.
- All type of protection.
- Good quality mounting pole, battery box.
- Easy to install.
- Super Bright LED for better lumens output. Life of LED is 10 times the life of CFL.
- Better Life - LED can work 100000 hrs. Lower wattage consumption & higher lumens I.E. 8W LED street light is equivalent to 16W CFL.



## Solar Home Lighting System (Generation Next)

Generation Next systems is a combination of photovoltaic solar module, DC fan, LED bulb/tube, Charge controller & Battery. It is available in different models and can be customized as per customer's requirement.

- Best quality LED -for longer duration.
- Innovative & Unique Design of LED tube for better lighting
- DC fan of 1250 RPM with 3 level speed.
- Sealed maintenance free lead acid battery.
- USB Mobile charger with multiple plugs.
- Can charge battery through AC Adapter.



# SOLAR HOUSEHOLD PRODUCTS

## Solar Lantern

Solar Lanterns are source of light powered by solar modules that give much higher light output in comparison with Kerosene Lanterns. The abundantly available sun light is the fuel use for these solar lanterns, in which adequate safety measures are taken care of.

### Kerosene Lantern V/s Solar Lantern

	Kerosene Lantern	Solar Lantern
Cost of Purchase	Rs. 100	Rs. 2000
Life Cycle (Approx)	2 Years	12 - 15 Years
Fuel Cost per month (Approx)	Rs. 55	NIL
Maintenance Cost	Very High	NIL
Lightning Efficiency	10 - 12 Lux	150 Lux



- High efficiency Solar PV Module.
- In house development of high grade electronics.
- No Electricity Bill.
- Short Circuit Protection.
- Environmental Friendly.
- Options of Charging through Solar and AC (Electric power).
- Best quality LED - for longer duration and reliability.
- Sealed maintenance free lead acid battery.
- Mobile charger facility with multiple plug.
- Lantern body made of ABS & Stainless Steel.
- Compact and light weight.
- Available in different sizes and shapes.
- Option of charge indicator.
- Safe for all user and applications.



Call Shirsh Energy team for more details on our household products

[info@shirshenergy.com](mailto:info@shirshenergy.com)

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# SOLAR POWERED WATER HEATING AND PUMPING

A solar water heater consists of mainly Collector to collect solar energy & an insulated storage tank. It is the process where the sun heats water and then the heated water is stored in storage tank. our Solar Water Heaters are equipped with latest technology giving you cost free hot water every-time you need it.



- "A" grade, high borosilicate 3.3 glass with tri-targets magnetron sputtering.
- Modern supporting structures for easy installation on different kind of roofs.
- Highly density PUF Insulation for more heat retention.
- Control panel with water level and temperature detector - Unique feature.
- Electric heater.
- Eco friendly.

Capacity ( Ltrs.)	130,170,200,250,300
Autonomy	72 Hrs
Operating pressure	Atmospheric
corrosion protection	Galvanized colour steel sheet
Tanks material	Stainless steel
Special Coating	55 mm thick polyurethane foam layer to keep water in the storage tank warm for 72hrs
Collector Material	A grade, high borosilicate 3.3 glass with 3 -Target Coating with CU/SS-ALN/AIN coating
Collector size	Outer Diameter 58 MM, Inner Diameter 47 MM & Length 1900 MM
Vacuum level	$5 \times 10^{-3}$ Pa
Thermal expansion of coefficient	$3.3 \times 10^{-4}$
Outer tube transmittance	>91%
Heat loss efficient	<0.6 w/m <sup>2</sup> degree Celsius
System support structure	Galvanized Anodized aluminium
Control Panel	Water and Temperature Detector

\* Solar water heaters are also available in various capacities on demand.

## Solar Water Pumping

One of the simplest and most economical uses of solar energy is for pumping water. With advancements in pumps and pump controllers, solar water-pumping systems have become fairly easy to install, operate, and maintain.

### Features of Solar Powered Pumping

- No inverter - D.C. motor connects directly to solar array
- Rugged construction
- Simple installation and maintenance
- Highly reliable

### Applications

- Village water supply
- Livestock watering
- Water supply to remote homes / agriculture
- Micro-Irrigation



### Equipments Supplied:

- Solar Photovoltaic Panels
- Stand & Accessories
- Solar submersible pump

# ENERGY AUDITS

An energy audit is an inspection, survey and analysis of energy flows for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s).

Shirsh Energy in association with Energetic Consulting Pvt Ltd is offering Project Owners, Developers and Financers, Operation & Maintenance companies & Individuals with Bureau of Energy Efficiency (BEE) approved energy audit services.

## Why Energy Audit Services ?

With ever falling unit rates (Rs/kWh) for Solar plants, the Return on Investment and payback period are constantly pushed further back. Under such circumstances it is imperative that Plant runs at its best efficiency generating maximum yield with high Capacity Utilization Factor (CUF).

An Energy audit is the best way to un-earth unused potential or to spot system inefficiency so that you get the best value for money from your Solar plant.



## Our USP's

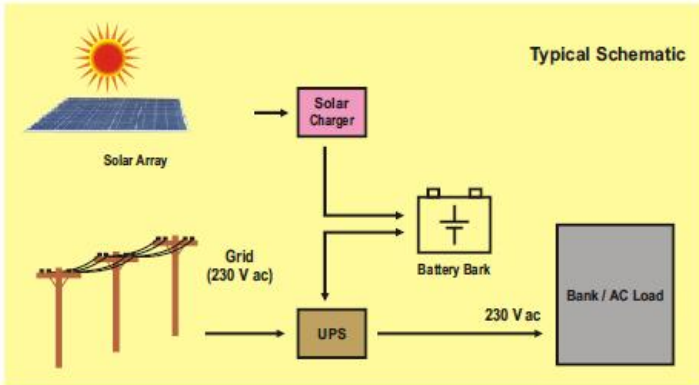
- We have been doing energy audits for around 10years now.
- We have completed around 200 national and international audits.
- Recognized by Bureau of Energy Efficiency (BEE) with a CRISIL rating of 3
- Winner of MEDA (Maharashtra Energy Development Agency) award for excellence for 3 consecutive years
- Have the experience and skilled resource and instruments to conduct energy audits.
- Our team members carry diverse experiences which enables us to deliver higher value than other energy auditing firms.

**Contact Shirsh Energy team for more details on our energy audit services at**

**[info@shirshenergy.com](mailto:info@shirshenergy.com)**

**Tel : 91 250 6052 333/444/555 | Fax : 91 22 3916 7073**

Be it office buildings, factories, villages, hospitals, educational institutions or campuses, Shirsh Energy offers a one-stop comprehensive solar solution that encompasses Solar Power Packs, Water Heating Systems, Water Pumping Systems, and Street Lighting Systems. We have developed the ready to install Solar Power pack which you can directly install on you roof tops or ground mounted and start using home made electricity.



For more information please visit our website  
[www.shirshenergy.com](http://www.shirshenergy.com)

**NOTES:**



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