WHY SHOULD YOU GO SOLAR?

BY: RUCHI BHAMBRI

INFORMATION

The time for going green is now, and the best way to do that is with solar panels.

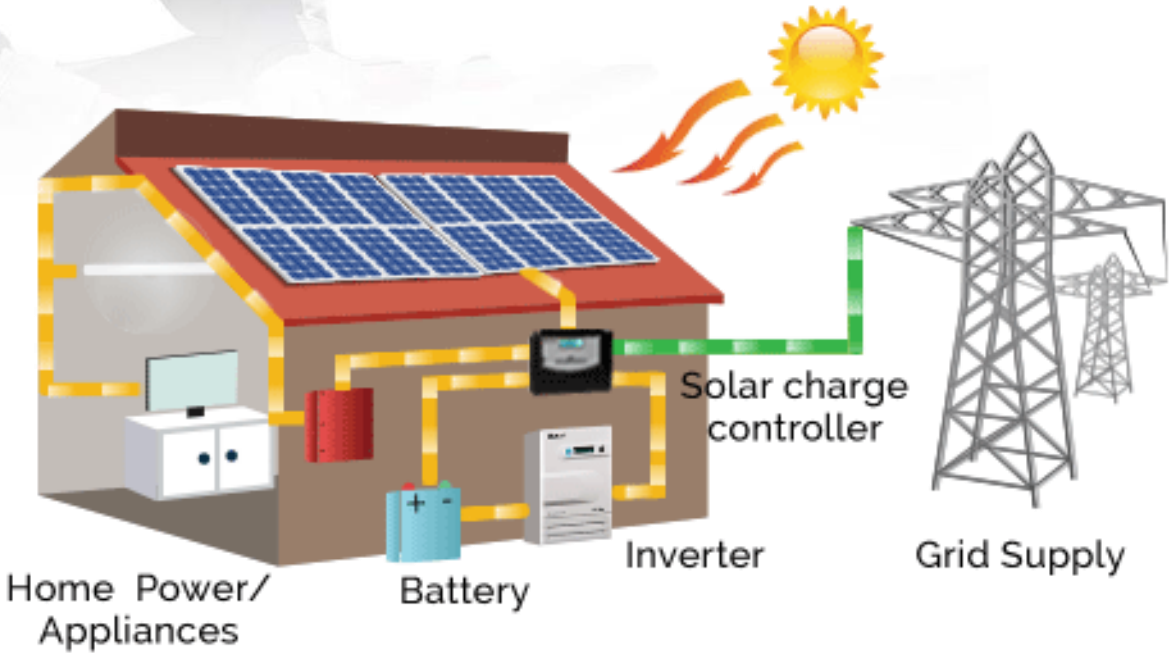
Solar energy production has increased in recent years because of its affordability due to mass consumerism as well as favorable weather conditions which provide a lot of sunlight.

The payback period on your system will be less than four years, while its life expectancy can last over 25 years depending what type you purchase! Your idle rooftop could also earn money too!

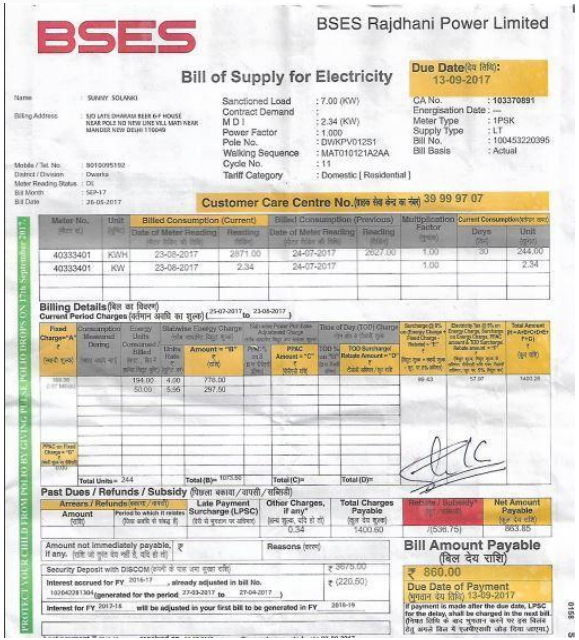
TOP 5 REASONS

- Solar Energy Production in India is Now Cheapest Across the World.
- Solar Reduces Fixed recurring cost
- Avail 100% Depreciation Benefit
- Homes have ideal flat Roof
- BE A SOLAR HERO!!!

SOLAR SYSTEM



HOW TO SELECT SOLAR SYSTEM CAPACITY



BSES

BSES Rajdhani Power Limited

Bill of Supply for Electricity

Due Date(देय तिथि): 13-09-2017

Sanctioned Load : 7.00 (KW)
Contract Demand :
M D I : 2.34 (KW)
Power Factor : 1.000
Pole No. : DWKPV012S1
Walking Sequence : MAT010121A2AA
Cycle No. : 11
Tariff Category : Domestic [Residential]

CA No. : 103370891
Energisation Date : ---
Meter Type : 1PSK
Supply Type : LT
Bill No. : 100453220395
Bill Basis : Actual

Customer Care Centre No.(ग्राहक सेवा केन्द्र का नंबर) 39 99 97 07

Meter No.	Unit	Billed Consumption (Current) Date of Meter Reading	Reading	Billed Consumption (Previous) Date of Meter Reading	Reading	Multiplication Factor	Days	Current Consumption Unit
40333401	KWH	23-08-2017	2871.00	24-07-2017	2627.00	1.00	30	244.00
40333401	KW	23-08-2017	2.34	24-07-2017		1.00		2.34

Billing Details(बिल का विवरण)
Current Period Charges (वर्तमान अवधि का शुल्क) (25-07-2017 to 23-08-2017)

Fixed Charges	Consumption Measured During	Energy Units Consumed Billed	Slabwise Energy Charge Units Rate	Amount = "B"	PPAC Amount = "C"	100 % on "B"	100 Surcharge/ Rebate Amount = "D"	Surcharge @ 8% on Energy Charge + Fixed Charge - Rebate = "E"	Electricity Tax @ 5% on Energy Charge, Surcharge on Energy Charge, PPAC amount & 100 Surcharge Rebate amount = "F"	Total Amount (H=A+B+C+D+E+F+G)
199.50	194.00	4.00	776.00					89.43	57.97	1403.28
	50.00	5.96	297.50							

Total Units = 244 | Total (B)= 1073.50 | Total (C)= | Total (D)=

Past Dues / Refunds / Subsidy (पिछला बकाया / वापसी / सब्सिडी)

Arrears / Refunds (बकाए / वापसी) Amount	Period to which it relates	Late Payment Surcharge (LPSC)	Other Charges, if any*	Total Charges Payable	Rebate / Subsidy*	Net Amount Payable
			0.34	1400.60	/(536.75)	863.85

Amount not immediately payable, if any. (जो अभी देय नहीं है, यदि हो तो) ₹ | Reasons (कारण)

Security Deposit with DISCOM (डिस्कॉम के पास जमा सुरक्षा राशि)	₹ 3675.00
Interest accrued for FY 2016-17 , already adjusted in bill No. 102042281304 generated for the period 27-03-2017 to 27-04-2017	₹ (220.50)
Interest for FY 2017-18 will be adjusted in your first bill to be generated in FY 2018-19	

Bill Amount Payable (बिल देय राशि)
₹ 860.00
Due Date of Payment भुगतान देय तिथि) 13-09-2017

If payment is made after the due date, LPSC for the delay, shall be charged in the next bill. (विलंब वित्तीय के बाद भुगतान करने पर इस बिल में अगले बिल में जुर्मानेशनी जोड़ दिया जाएगा।)

PROTECT YOUR CHILD FROM POLIO NOW GIVING OF PULSE POLIO DROPS ON 17th September 2017

Average monthly units: 6000 units

Per day units: 6000/30 = 200 units

1 kw Solar generate per day = 4 units

Solar system capacity: 200/4 = 50 kw

So, If your monthly consumption is 6000 units , then a 50 kw can make you 100% solar reliant .

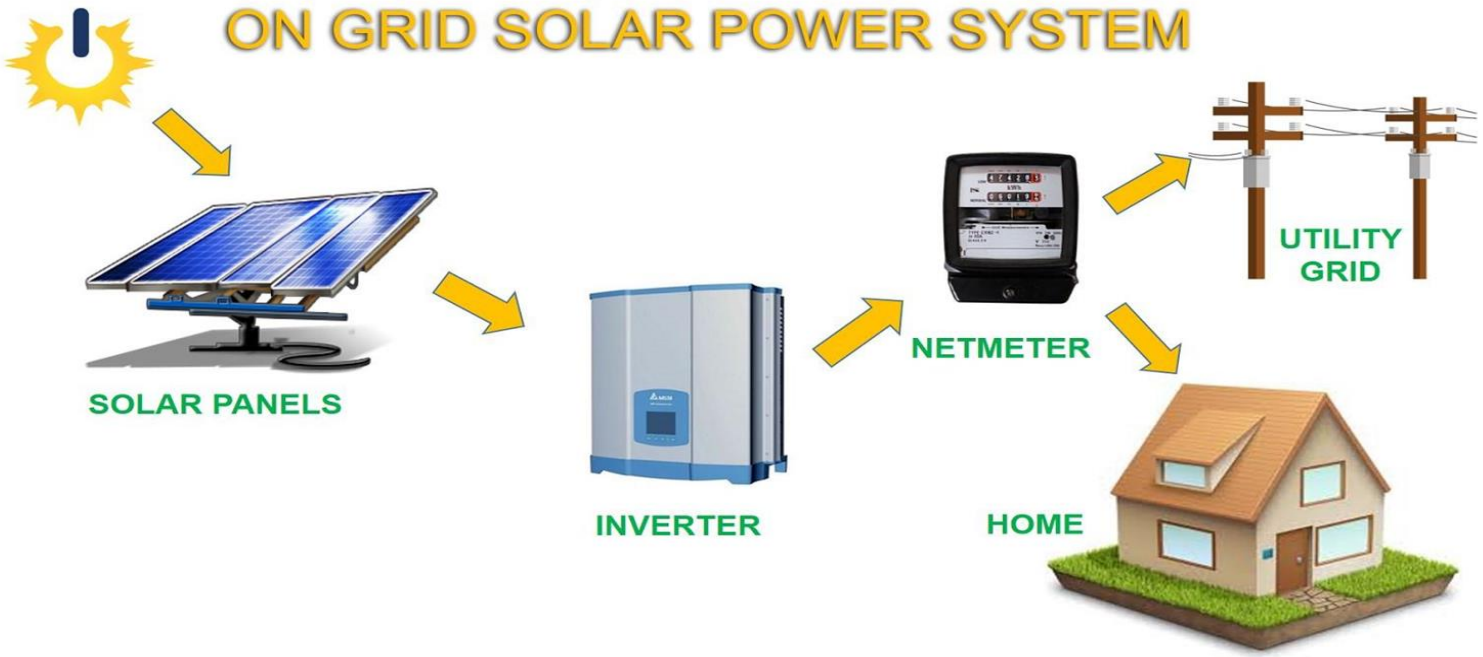
KEY POINTS

- 100 square feet area for 1kw
- Shadow free area required
- Solar panel should face south for northern hemisphere
- 1kw plant generate 4 units a day
- Tilt angle is usually Latitude of the place
- Life of solar power plant up to 25+ years

TYPES OF SOLAR POWER PLANT

- ON Grid Solar Power Plant
- OFF Grid Solar Power Plant
- Hybrid Grid Solar Power Plant

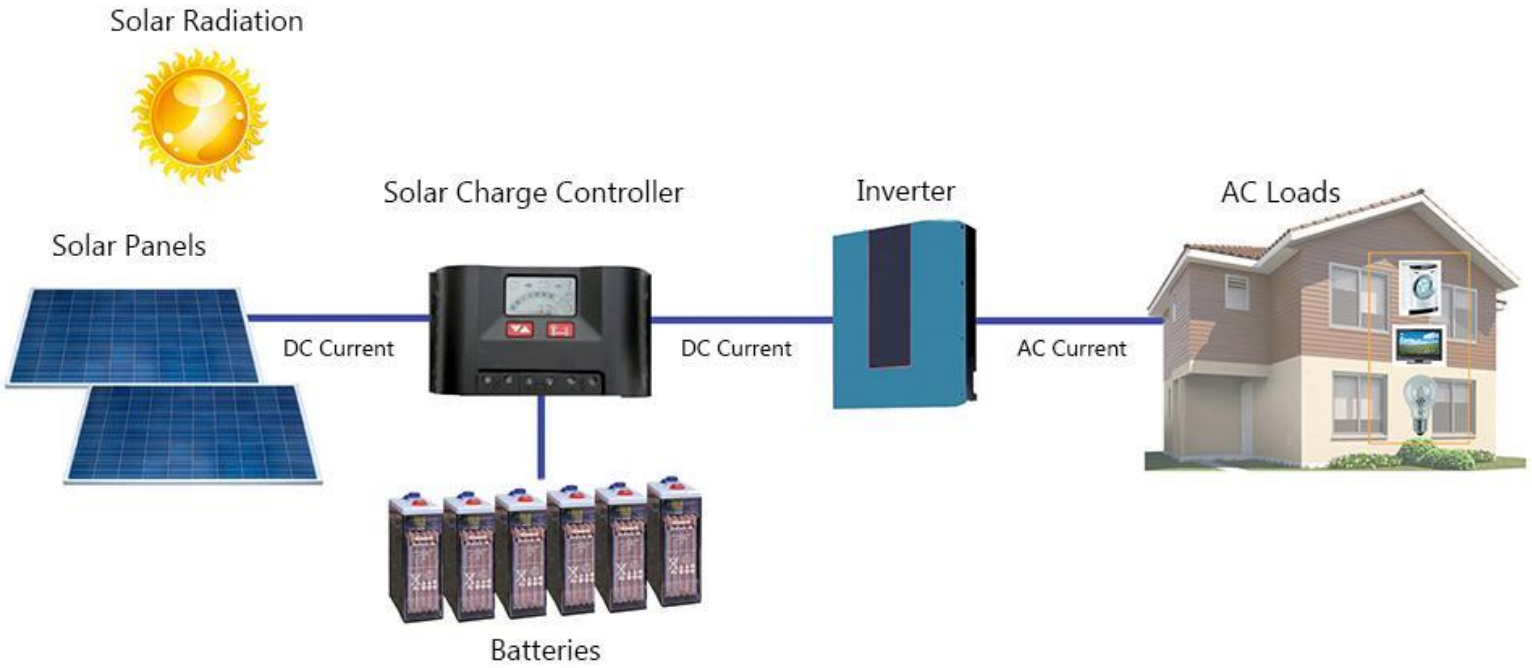
ON-GRID SYSTEM



ON-GRID SYSTEM

- The on-grid solar system also known as grid tie or connected solar system. This is the most cost effective type for solar system compare to off grid and hybrid solar system for electricity saving or reduce bill.
- In this solar system, solar inverter converts the DC electricity produced by solar panel into AC electricity. Which can then be used directly at home or business.
- If system is producing more power than is being consumed, the surplus is fed into the main electrical grid via solar net metering. At the time of electricity billing government or power provider company will adjust the exported units in your electricity bill.

OFF-GRID SYSTEM



OFF-GRID SYSTEM

- Off-grid systems work **independently of the grid** but have batteries which can store the solar power generated by the system. The system usually consists of solar panels, battery, charge controller, grid box, inverter, mounting structure and balance of systems.
- Using an **off-grid** solar **system** means avoiding power outages, reducing electricity costs, easing installation in homes, presenting an alternative power source for rural areas, and keeping the environment clean and green.
- However, there **are disadvantages** because **off-grid systems** require you to purchase back-up battery which can be expensive, bulky.
- This System Is ideal for villages and places in Mountains which do not have electricity from the Grid .

HYBRID SOLAR POWER PLANT

HYBRID SOLAR POWER PLANT

- **Hybrid** system is a combination of **Solar Energy** storage with grid connection.This system provide the flexibility of being able to store the **power** into batteries that your **solar** system generated during the day time instead of feeding it back into **electricity** grid.
- A **hybrid solar system works** by sending **Solar Power** to your inverter, which then sends energy to **power** your home. Extra energy that is not used to **power** your home goes to your home battery for storage. This battery can provide **power** to your home when your **solar panels** are not producing energy.

TYPES OF SOLAR PANELS

Monocrystalline

Polycrystalline

Thin Film

MONO CRYSTALLINE

Monocrystalline

Monocrystalline solar panels have solar cells made from a single crystal of silicon

Aesthetics : Solar cells are a black hue

Efficiency : 15% to 20%

Life : 25+ years

POLY CRYSTALLINE

Polycrystalline

Polycrystalline solar panels have solar cells made from many silicon fragments melted together

Aesthetics : Solar cells have a bluish hue

Efficiency : 14% to 16%

Life : 25+ years

THIN FILM

Thin Film

Thin-film solar panels are typically made with Cadmium Telluride, Amorphous Silicon, Copper Indium Gallium Selenide, Gallium Arsenide

Aesthetics : Solar cells have a black- blue hue

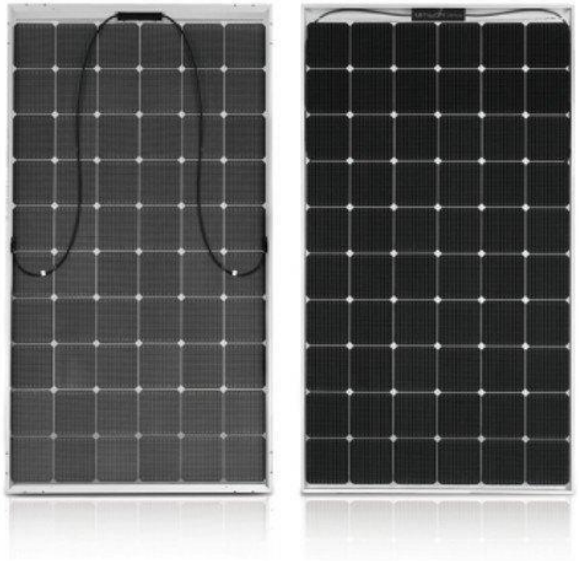
Efficiency : 11% to 13%

Life : 25+ years

SITE OF THIN FILM

NEW TECHNOLOGY

NEW!

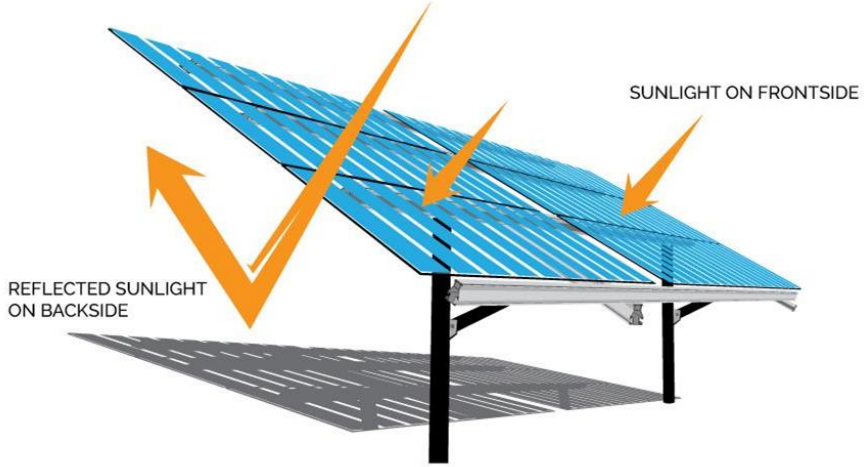


Bifacial Panel

Half cut panel

BIFACIAL PANEL

Bifacial solar modules offer many advantages over traditional solar panels. Power can be produced from both sides of a bifacial module, increasing total energy generation. They’re often more durable because both sides are UV resistant, and potential-induced degradation (PID) concerns are reduced when the bifacial module is frameless. Balance of system (BOS) costs are also reduced when more power can be generated from bifacial modules in a smaller array footprint.



Total produced energy from the front + energy from the back

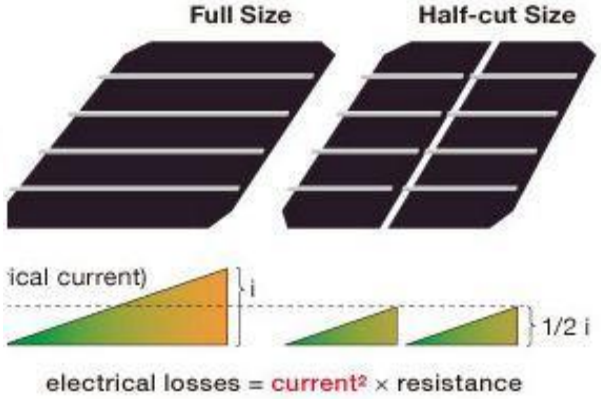
Efficiency: 22% to 30%

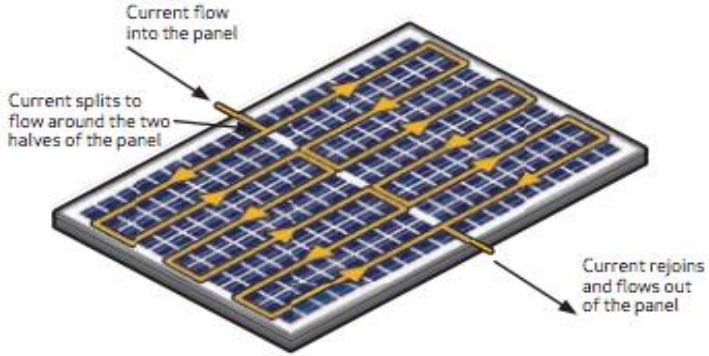
BIFACIAL PANEL

Pushpanjali (30 kw)

HALF CUT PANEL

Half-cell modules have solar cells that are cut in half, which improves the module's performance and durability. Traditional 60- and 72-cell panels will have 120 and 144 half-cut cells, respectively. When solar cells are halved, their current is also halved, so resistive losses are lowered and the cells can produce a little more power. Smaller cells experience reduced mechanical stresses, so there is a decreased opportunity for cracking. Half-cell modules have higher output ratings and are more reliable than traditional panels





KEY POINTS

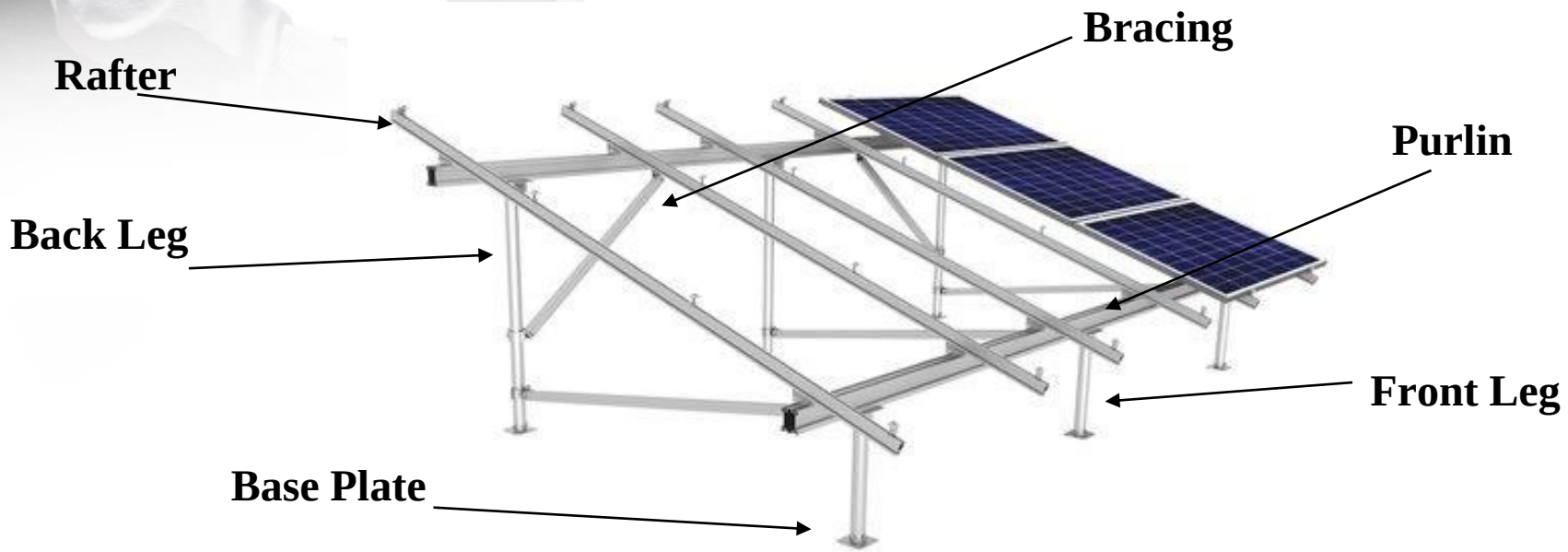
- Monocrystalline solar cells are more efficient because they are cut from a single source of silicon.
- Polycrystalline solar cells are blended from multiple silicon sources and are slightly less efficient.
- Thin-film technology costs less than mono or poly panels, but is also less efficient. It is mainly used in large-scale commercial applications.
- N-Type cells are more resistant to light-induced degradation than P-Type cells.
- PERC Cells add a reflective layer to give the cell a second oppportunity to absorb light.
- Half-cut cells improve solar cell efficiency by using smaller ribbons to transport electrical current, which reduces resistance in the circuit.
- Bifacial solar panels absorb light on both sides of the panel.

SOLAR INVERTER

TYPES OF SOLAR INVERTER

The main purpose of the solar inverter is to translate or “invert” the solar energy—generated by your solar panels—from DC to AC so that your home and utility grid can use it. So that’s the first and most crucial service it provides. But, in addition to inverting energy from one form to another, your inverter serves another important purpose: online communication.

SOLAR STRUCTURE



Mounting structures are the backbone of a **solar** power plant as they provide support to modules. These support **structures** raise **solar** panels at appropriate angles to ensure that they receive maximum **solar** irradiation.

GALVANIZING PROCESS

- **Hot dip Galvanized**
- **Pre Galvanized**
- **Aluminum Structure**

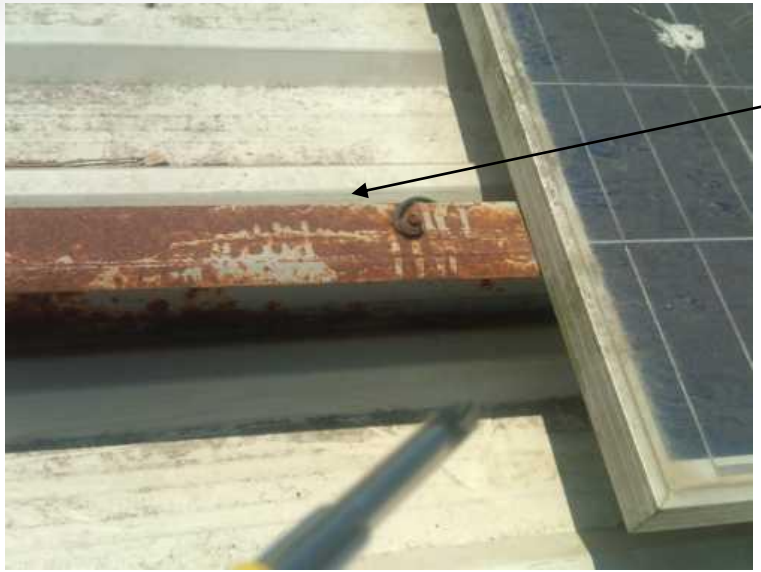
GALVANIZING PROCESS

- **Galvanize : 75 to 80 micron**
- **Rust proof Structure**
- **Life : 20+ year**

GALVANIZED STRUCTURE

Galvanized structure is among the most popular steel types because of its extended durability, having the strength and formability of steel plus the corrosion protection of the zinc-iron coating. The zinc protects the base metal by acting as a barrier to corrosive elements, and the sacrificial nature of the coating results in a long-lasting and high-quality steel product.

NON GALVANIZED STRUCTURE



Rusting

TYPES OF SOLAR STRUCTURE

GROUND MOUNT STRUCTURE

Mounting systems are essential for the appropriate design and function of a solar photovoltaic system. They provide the structural support needed to sustain solar panels at the optimum tilt, and can even affect the overall temperature of the system. Based on the selection of the solar mounting structure, the cooling mechanism will vary. Ground-mounted solar panels will have better airflow from both sides; therefore, they will cool off easier than roof-mounted panels, and this difference will affect the overall temperature control of solar panels and their efficiency.

ROOFTOP STRUCTURE

SUPER STRUCTURE

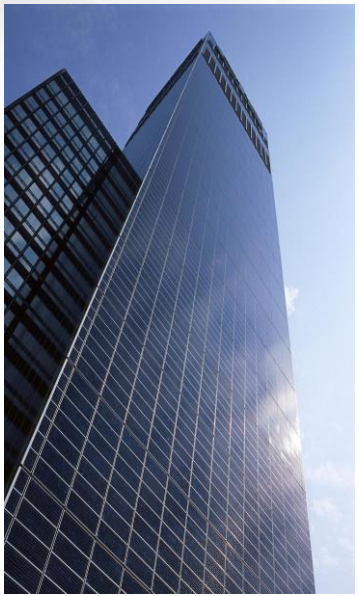
TIN SHED STRUCTURE

BIFACIAL SOLAR STRUCTURE

PARKING SHED

We can create a roof underneath a solar installation, solar can be used aesthetically over car parks, roof tops , over swimming pools. Nowadays, electric vehicles are becoming popular. **Electric Vehicles and Solar are the way to go in future**

BUILDING INTEGRATED PHOTOVOLTAIC

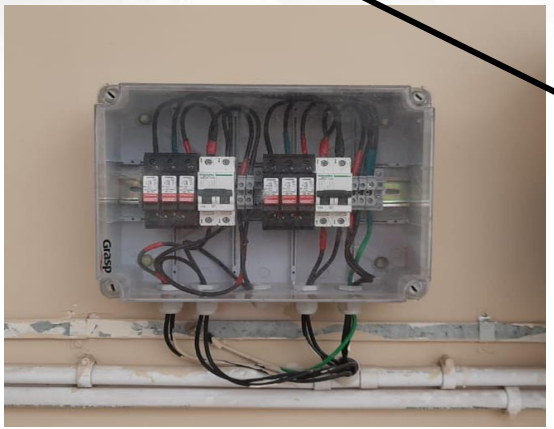


Building-integrated photovoltaics (**BIPV**) are photovoltaic materials that are used to replace conventional building materials in parts of the building envelope such as the roof, skylights, or facades

PROTECTION DEVICES

DC MCB

DC SPD



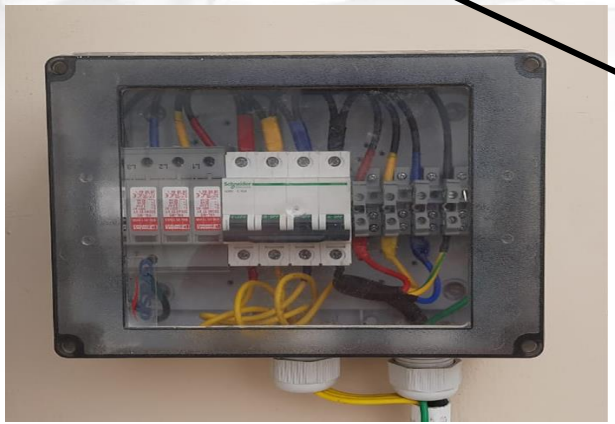
DC Distribution Box

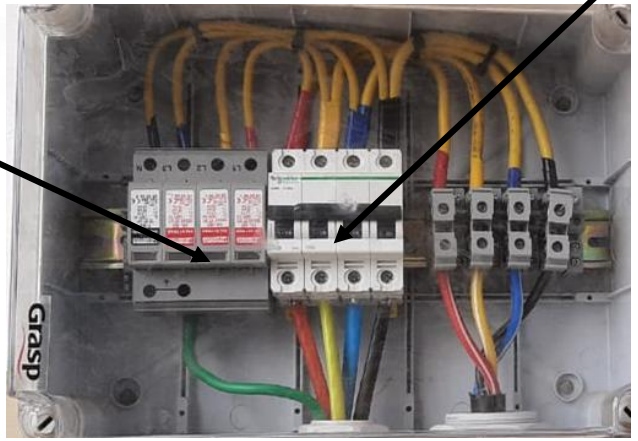
DCDB controls the DC power from solar panel and with having necessary **surge protection device** (SPD) and fuses. DCDB protect the solar panel, solar inverter and solar battery from any type of damage in solar system. All switches at the circuit breakers, connectors confirm to IEC 60947, part I, II and III

PROTECTION DEVICES

AC SPD

AC MCB





AC Distribution Box

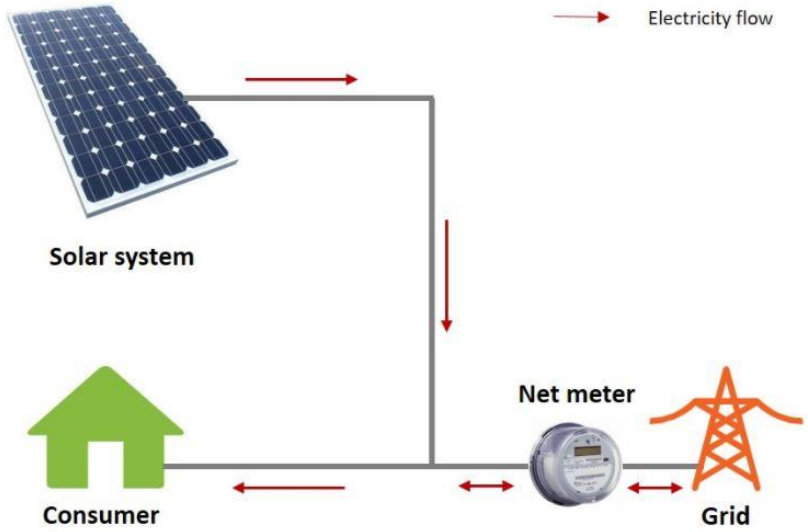
ACDB includes **necessary surge protection device (SPD)**,MCB to protect the solar inverter from any type of damage or heavy voltage, Contactor for reverse protection and Voltage protector. Specifications of ACDB may change as per load or inverter capacity.

EARTHING AND LIGHTNING ARRESTOR

Earthing is important in solar because-

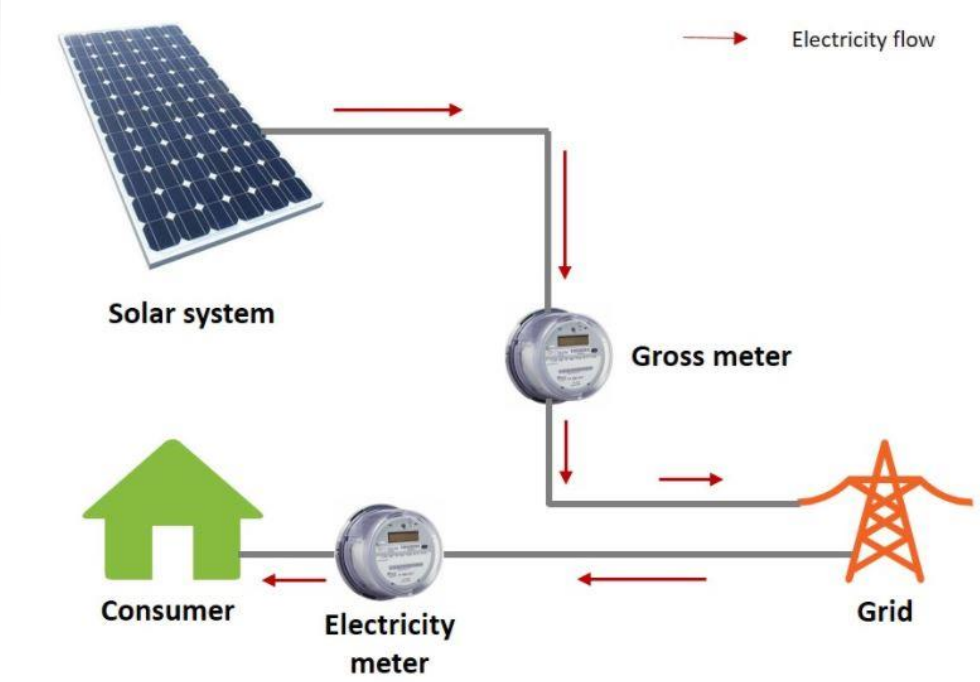
1. A lightning conductor system surrounds them
2. Solar panels have inbuilt transformers that set up the voltage generated through solar power plants. Due to their designs, they are more prone to shocks. In case you require earthing for a PV solar power system, you need the following elements like an earth cable, earthing joint, and an earth plate
3. To protect the workers around the solar power plants
4. To keep solar power plants in check at regular intervals
5. A grounding path will easily avoid any electrical fault and would not pose a threat to system stability

NET METER



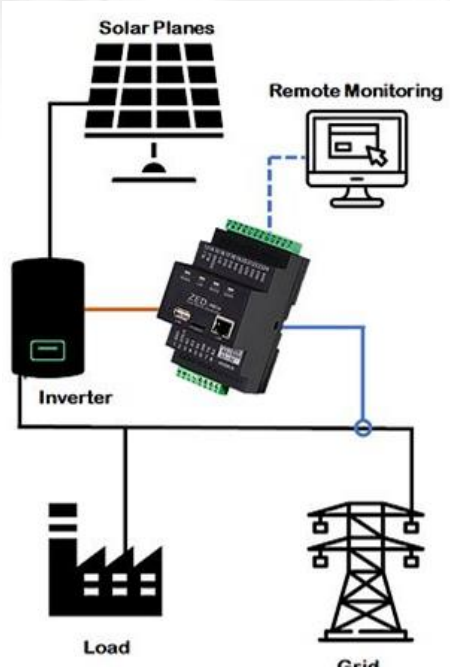
Net metering is a **mechanism which allows domestic or commercial users** who generate their own electricity using solar panels or photovoltaic systems to export their surplus energy back to the grid

GROSS METER



Gross metering is an arrangement in which a consumer is compensated at a fixed feed-in-tariff for the total number of units of solar energy generated and exported to the grid (accounted by a unidirectional ‘gross meter’) and has to pay the electricity distribution company (discom) at retail supply tariff for the electricity consumed from the grid. The feed-in-tariff and retail supply tariff are typically different rates.

ZERO EXPORT DEVICE



Zero Export device enable solar system owners & operators to limit the amount of solar power that their systems **export** to the electricity grid or DG SET. **Export** limitation means that the amount of solar energy in the system is controlled by adjusting the set point of the inverter in the system.

HOW CAN I CHECK MY GENERATION?

CO2 SAVINGS

40.81 Ton

TREE SAVINGS

1,046

FUEL SAVINGS

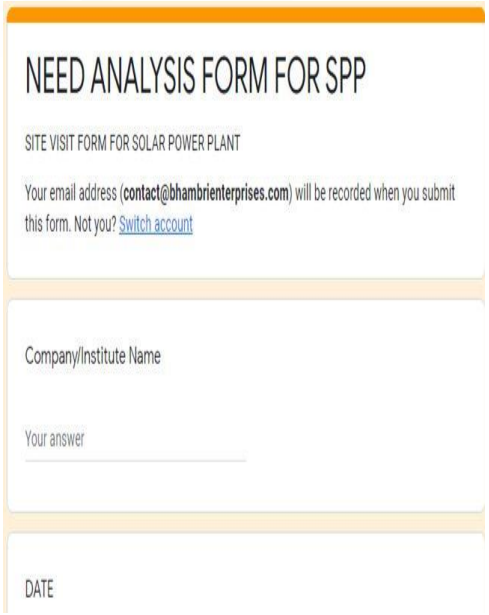
272,068 km

ONLINE MONITORING

Solar remote monitoring system helps you to access the generation of the solar plant on a daily real time basis. This helps to know the performance of the system.

Site Visit

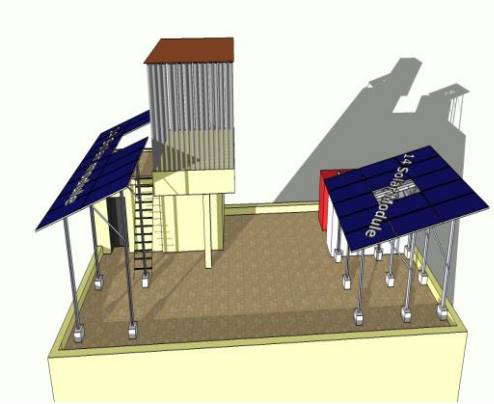
Need Analysis



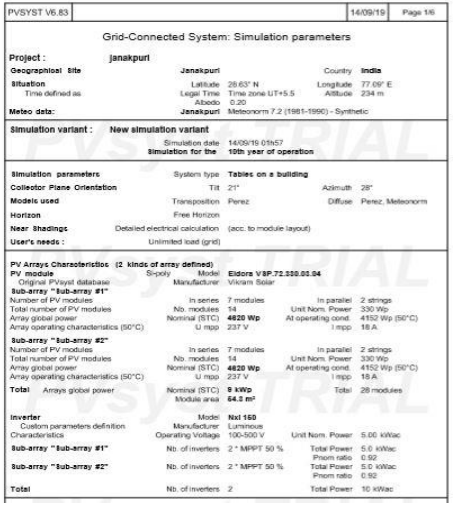
Structure Analysis

Processes followed by BHAMBRI SOLAR PVT LTD

Shadow



Generation



PVSYST V6.83 | 14/09/19 | Page 1/6

Grid-Connected System: Simulation parameters

Project : janakpuri

Geographical Site	Janakpuri		Country	India
Situation	Latitude	28.63° N	Longitude	77.09° E
Time defined as	Legal Time	Time zone UT+5.5	Altitude	234 m
	Albedo	0.20		
Meteo data:	Janakpuri	Meteonorm 7.2 (1981-1990) - Synthetic		

Simulation variant : New simulation variant

Simulation date	14/09/19 01h57
Simulation for the	**10th year of operation**

Simulation parameters	System type	**Tables on a building**		
Collector Plane Orientation	Tilt	21°	Azimuth	28°
Models used	Transposition	Perez	Diffuse	Perez, Meteonorm
Horizon	Free Horizon			
Near Shadings	Detailed electrical calculation	(acc. to module layout)		
User's needs :	Unlimited load (grid)			

PV Arrays Characteristics (2 kinds of array defined)

PV module	Si-poly	Model	**Eldora V8P.72.330.03.04**	
Original PVsyst database		Manufacturer	Vikram Solar	
Sub-array "Sub-array #1"				
Number of PV modules	In series	7 modules	In parallel	2 strings
Total number of PV modules	Nb. modules	14	Unit Nom. Power	330 Wp
Array global power	Nominal (STC)	**4620 Wp**	At operating cond.	4152 Wp (50°C)
Array operating characteristics (50°C)	U mpp	237 V	I mpp	18 A
Sub-array "Sub-array #2"				
Number of PV modules	In series	7 modules	In parallel	2 strings
Total number of PV modules	Nb. modules	14	Unit Nom. Power	330 Wp
Array global power	Nominal (STC)	**4620 Wp**	At operating cond.	4152 Wp (50°C)
Array operating characteristics (50°C)	U mpp	237 V	I mpp	18 A
Total Arrays global power	Nominal (STC)	**9 kWp**	Total	28 modules
	Module area	**64.8 m²**		

Inverter	Model	**Nxl 150**		
Custom parameters definition	Manufacturer	Luminous		
Characteristics	Operating Voltage	100-500 V	Unit Nom. Power	5.00 kWac
Sub-array "Sub-array #1"	Nb. of inverters	2 * MPPT 50 %	Total Power	5.0 kWac
			Pnom ratio	0.92
Sub-array "Sub-array #2"	Nb. of inverters	2 * MPPT 50 %	Total Power	5.0 kWac
			Pnom ratio	0.92
Total	Nb. of inverters	2	Total Power	10 kWac

Installation

After the site visit and analysing the need and structure ,a shadow analysis is done using various softwares like Solar Lab,Pv Syst,Auto Cad ,Google Sketchup. This is followed by installation and commissioning . Parallely Net metering liaising work is done with Discoms.

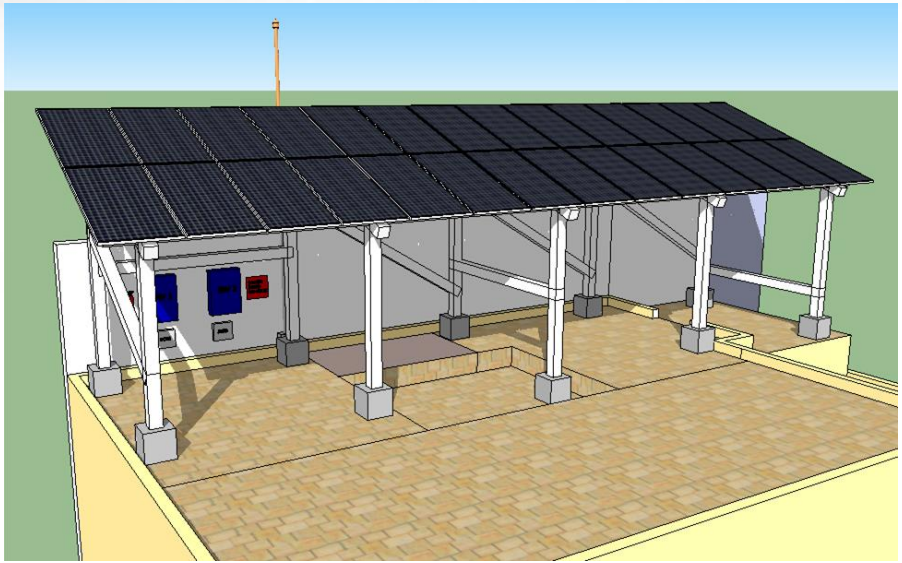
Net metering

Online Monitoring

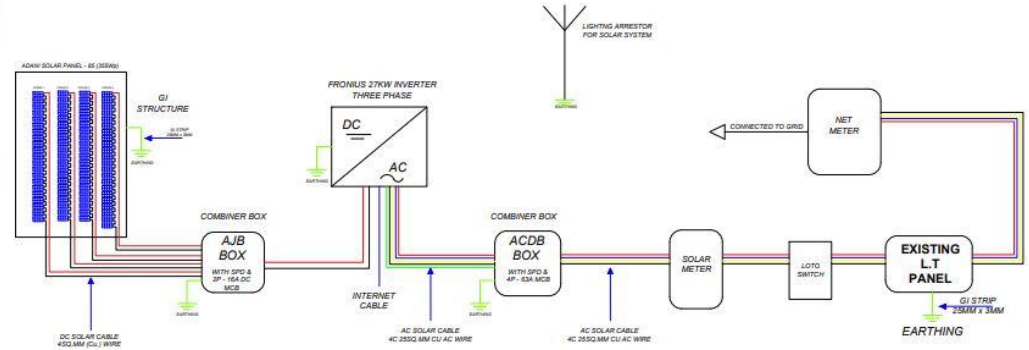
Handover Documents

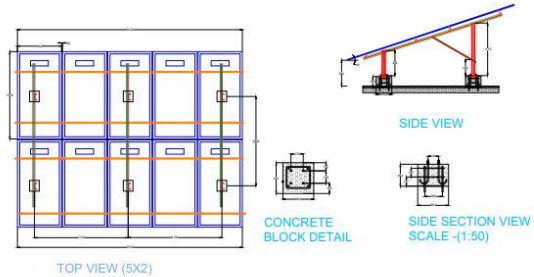
3D DESIGN

3D DESIGN



LAYOUTS





LOGO	INSTALLER INFORMATION	PROJECT DETAIL	SYSTEM DESCRIPTION				INSTALLER INFORMATION	
BHAMBRI SOLAR	BHAMBRI SOLAR PVT. LTD.	ADDRESS	MODULE	ADANI (355Wp)	TILT ANGLE	-	DATE	-
		PUSHPANJALI FARMS	QUANTITY	85	AZIMUTH	-	DESIGNED BY	LAKSHAY
			SYSTEM (DC)	30Kw	INVERTER	FRONIUS	CHECK BY	
			SYSTEM (AC)	-	QUANTITY	1	SHEET SIZE	A4

SL NO	DESCRIPTION	TYPE	QUANTITY PER TABLE (QTY)	TOTAL QTY OF TABLES (QTY)	TOTAL NO OF FASTENERS (QTY)	DIA OF BOLT (MM)	LENGTH OF BOLT (MM)	GRADE	DETAILS
1	COLUMN TO RAFTER	M12X30	12	3	36	12	30	SS304	1 SPRING WASHER
2	RAFTER TO PURLIN	M12X30	18	3	54	12	30	SS304	1 SPRING WASHER
3	COLUMN TO BRACING	M12X30	25	3	75	12	30	SS304	1 SPRING WASHER
4	PURLIN TO MODULE	M8X20	60	3	180	8	20	SS304	1 SPRING WASHER

SLOT/HOLE DETAILS

Sr No	Sr No	HOLES/SLOT
1	BASE PLATE	(13.5X24)MM
2	COLUMN TO BRACING	(13.5X24)MM
3	COLUMN TO RAFTER	(13.5X24)MM
4	BRACING TO COLUMN	(13.5X24)MM
5	BRACING TO RAFTER	(13.5X24)MM
6	RAFTER TO BRACING	(13.5X24)MM
7	RAFTER TO PERLIN	(13.5X24)MM
8	PURLIN TO MODULE	(8X15)MM

NOTE:

DESIGN SPECIFICATIONS:

PROJECT TITLE:

CLIENT:

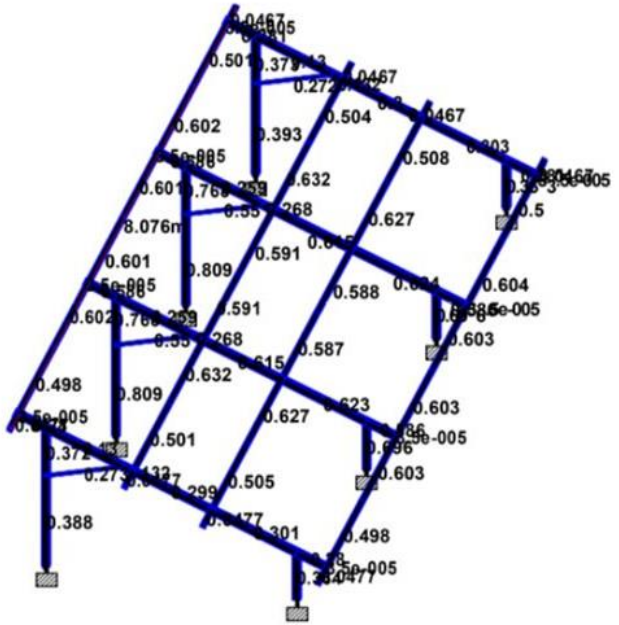
EPC CONTRACTOR:

CONSULTANT:

DRAWING TITLE:

DRAWING NO.			NTS
DRAWN	AKSHAY MEHRA	SHEET NO.	1
CHECKED	NS	PAPER SIZE	A3
APPROVED	KK		
DATE	11/19/2019	REV NO.	R01

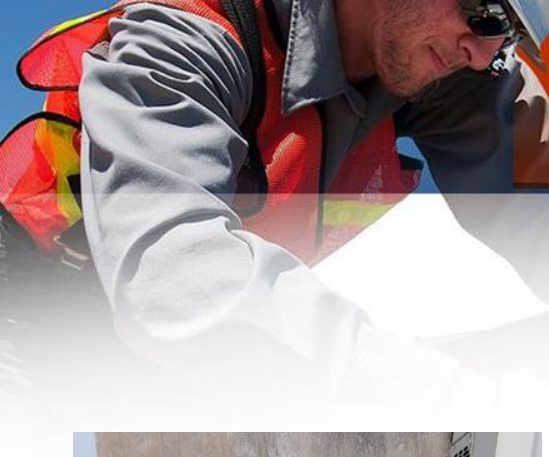
STRUCTURE DESIGN



POOR INSTALLATION

DON’T BE PENNY WISE AND POUND FOOLISH

IMPACT OF POOR INSTALLATIONS



HOW TO MAINTAIN SOLAR POWER PLANT

- Cleaning your panels Once in a week
- Time : Morning/Evening

SUBSIDIES

The applicable subsidy for various capacities of rooftop solar power systems installed at individual residential households

- Residential sector Upto 3 kW 40%
- Residential sector 3kW -10 kW 20%
- Group Housing Societies More than 500 kW 20%
- More than 10 kW, subsidies can be availed for the initial 10 kW as per the regulations mentioned above. Hence subsidies cannot be availed for capacity above 10 kW.

HOW CAN YOU HAVE SOLAR

- CAPEX
- LOAN
- RESCO

SOLAR CAPEX vs OPEX (RESCO)

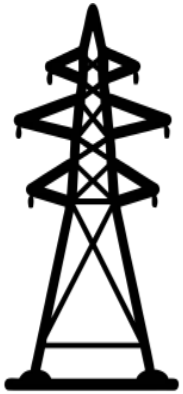
CAPEX

Install the solar power system

Generate power with the help of solar energy

Excess energy sold to Grid

Makes Settlement for excess energy



System Installer

Installs the solar power system at customer's site.

Solar Power Plant

CAPEX is the most common type of rooftop deployment in India.

Customer

- Owns the system.
- Aims to reduce his power cost.
- Bears the entire expenditure from installation to O&M.

Utility Grid

OPEX/RESCO

Use rooftop for installation

Pay for electricity consumed

Pay for extra energy sold

Customer
Pay on per unit price basis

RESCO
Owns the solar power system

Responsible for Installation & O&M

Utility Grid

Generate Power

Sell Extra Energy

Solar Power Plant

OPEX	CAPEX
Customer does not have to finance the plant. Business owner signs a Power Purchase Agreement.	100% investment borne by the customer
The O&M of the plant is also taken care of by the solution provider	Customer pays separately for O&M to manage equipment and downtime losses
Levelized cost of solar is above INR 5/unit	Levelized cost of solar is below INR 5/unit
Customer only pays tariff for the consumption of energy generated and enjoys savings on monthly energy bills from day 1	Customer enjoys cheap electricity and overall savings after cost of installation is recovered. Payback period is around 4 to 5 years
Solution provider bears all the performance and maintenance risk and is incentivized to maximize generation because revenues are linked entirely to generation	Customer bears all maintenance and performance risks
No Tax benefits for customer	Customer can claim tax benefit through accelerated depreciation

TESTIMONIAL

Sister Beena
(Notre dame School)

“Ruchi visited our convent & school, she saw all our bills. She explained what was best for minimizing the bill at each place & helped us to get the govt subsidies. Ruchi is very friendly and professional. The solar system installed by Bhambri solar has exceeded our expectations and we are very happy with her and her team.”

TESTIMONIAL

Gurpreet Khurana
(Director of Le Vastram)

“Hum dil khol kr AC chalate hai din raat aur bill humara zero aa raha hai. Thank you Ruchi”

TESTIMONIAL

Mr. Sanjeev Jain
(CEO of TNS networking)

“With Air conditioners running 24*7 in summers, the bill was rocket high in summers. Ruchi suggested a solar plant with tracker. We also felt the difference in the cooling in the rooms below. Great products at a wonderful price!!!

BSES

Date of Print Out: 17.07.2020

BSES Rajdhani Power Ltd.

Bill of Supply for Electricity

GSTIN : 07AAGCS3187H2Z3

Due Date:
--

Name : NARINDER PAL SINGH KHURANA & GURPREET SINGH KHURANA
Billing Address : S/O GURBACHAN SINGH & S/O NARINDER PAL PLOT NO- M-116 S/F BLOCK-M VIKAS PURI NEW DELHI 110018

Mobile / Tel. No. :9810693931
Email ID :
District / Division :Vikas Puri
Walking Sequence :VKP010158Q0BS
Bill Month :JUL-20
Bill Date :15-07-2020

Sanctioned Load :5.00 (kW)
Contract Demand :
M D I :4.74 (kW)
Power Factor : .997
Pole No. :VKPPJ314S1
Meter Reading Status :DL
Cycle No. :0N

Tariff Category :Domestic [Residential]

CA No. :152898674
Energisation Date :20.07.2019
Meter Type :3PSK
Supply Type :LT
Bill No. :100036154405
Bill Basis :Actual
O.D. No. :R/20/10189206225
CCTV Tagged :No
Street Light Tagged :No
WI-FI Tagged :No

Customer Care Centre No. 39999707

Meter Details in Annexure

Billing Details — Current Period Charges (02-06-2020 to 08-07-2020)

Fixed Charges (A)	Slab-wise Energy Charges				Slab-wise FPA/PPA		TOD		Srchrg@8% on (E=A+B+D+R)	Elec.tricity Tax @ 5% (H)	Total Amount (A+B+C+D+E+F=G+H)
	Cons. Metered During	Billed Units	Unit Rate	Amount(B)	PPAC% on B	Amount(C)	TOD% on B	Surg/Rebt. Amount (D)			
306.19 1.23 Mth(s)									24.50	434.34	800.97
PPAC on Fix Chg(G)									Pension Surcharge @3.80%-(F)		
24.30									11.64		
CCTV Units									CCTV Bill Amount (I)		
0.00									0.00		
Street Light Units									Street Light Points (W)		
	TOTAL ->	0		0.00		.00			10W	20W	40W
WI-FI Units											

Past Dues / Refunds / Subsidy

Arrears / Refunds		Late Payment Surcharge (LPSC)	Other Charges, if any "	Total Charges Payable	Refund(R) / Subsidy	Net Amount Payable
Amount	Period to which it relates					
(214.46)		12.60	0.00	599.11	0.00(800.97)	(201.86)

Amount not immediately payable, if any.	Rs. 0.00	Reasons
Service line cum development charges paid	Rs. 14364.99	Security Deposit with DISCOM Rs. 4500.00
Interest accrued for FY 2019-20 already adjusted in bill No.100095746337 (generated for the period 12-03-2020 to 1-04-2020).		Rs. (218.20)
Interest for FY 2020-21 will be adjusted in your first bill to be generated in FY 2021-22		

Bill Amount Payable
Rs. 0.00

Due Date of Payment
--

If payment is made after the due date, LPSC for the delay, shall be charged in the next bill.

Last payment Rs. 15700.00 received on 24-03-2020 Payment Accounted Upto. 12-07-2020
The connection shall be liable for disconnection on non payment of all dues(including arrears of previous bill(s)) by due date, after notice as per Section 56(1) of the Electricity Act, 2003.

BSES

Date of Print Out: 17.07.2020

BSES Rajdhani Power Ltd.

Meter Details Annexure

CA No. :152898674
Bill No. :100036154405
Bill Date :15-07-2020
Name :NARINDER PAL SINGH KHURANA & GURPREET SINGH KHURANA
Billing Address :S/O GURBACHAN SINGH & S/O NARINDER PAL PLOT NO- M-116 S/F BLOCK-M VIKAS PURI NEW DELHI 110018

Net Meter Consumption Details (Date of Reading : 08-07-2020)

Total Solar Generation Units	For The Billing Period	Cumulative Generation in FY	Solar Installation Details	Date of Installation	Capicity kWp
	4768	5450		02-01-2020	10.73

B/F Units (If any)	Export Reading			Import Reading			Net Difference			Moderated Units			C/F Units (If any)
	Normal	Peak	Offpeak	Normal	Peak	Offpeak	Normal	Peak	Offpeak	Normal	Peak	Offpeak	
0	3116	0	0	1710	0	0	(1406)	0	0	0	0	0	(1406)

(Consumption in the above table are in kWh/kVAh, as applicable)

Meter No	Units	Billed Consumption (Current)		Billed Consumption (Previous)		Multiplication Factor	Current Consumption	
		Date of Meter Reading	Reading	Date of Meter Reading	Reading		Days	Units
47001468	kWh	08-07-2020	6,952.50	01-06-2020	2,184.59	1.00	37	4,768.00
47001468	kW	08-07-2020	8.26			1.00		8.26
47001468	kVAh	08-07-2020	6,953.30	01-06-2020	2,185.30	1.00	37	4,768.00
47001468	kVA	08-07-2020	8.26			1.00		8.26
48650966	kWh	08-07-2020	3,321.50	01-06-2020	1,611.58	1.00	37	1,710.00
48650966	kW	08-07-2020	4.74			1.00		4.74
48650966	kVAh	08-07-2020	3,329.50	01-06-2020	1,613.09	1.00	37	1,716.00
48650966	kVA	08-07-2020	4.74			1.00		4.74
48650966	kWh_N	08-07-2020	4,922.00	01-06-2020	1,805.83	1.00	37	3,116.00

CASE STUDY

Sanjeev Solanki used to get Rs 6-7K per month, staying on the top floor his Air conditioning wasn't effective and bill went high in summers.

He heard about Solar plants and subsidies and from Facebook, he got a reference of Bhambri Solar Pvt Ltd. He contacted them, their team visited and did a complete need analysis and suggested a solar plant understanding the requirements of Sanjeev. A 6 kW solar plant was installed at a height of 7 ft above the terrace. Sanjeev got the subsidized plant. The system surpassed his expectations, his floor underneath got less heat and Air conditioners became more effective at 20 degrees. He got a ZERO bill and in fact, was exporting the excess electricity. During one of the maintenance visits on the Suggestion of the Bhambri Solar team, he got a water cleaning system and the system performance further enhanced and now he bought a Tata Electric Car. He charges his bike battery with the extra units of electricity so not only is he running his Air conditioners and his entire home power for free, but he is also traveling free because his Electric Car battery is charged by Solar. He is happy and proud and can't thank Ruchi and team Bhambri for their excellent work and service.

THANK YOU!!!

The time has come to be really conscious of the environment and save our money by switching over from a power grid. The cost of electricity is so high that it's much cheaper for you to purchase solar panels now, which are made affordable with mass consumption around the world. So what if we have great sunlight? That only means there is more opportunity for us all! Plus your roof could produce an income in return just like any other property investment

The best time to go Solar as been here since long ago when people started becoming aware about environmental conservation and costs associated were going up due rise in gas prices etc but then came across this amazing solution where PV modules became very cheap who knows why ! All they know its because everyone wanted them . Life span