SOLAR BIRD
SOLAR EPC

SOLAR BIRD
SOLAR EPC SERVICES

INDUSTRIAL

COMMERCIAL

RESIDENTIAL

SERVICES

- Rooftop Solar Panel Installation
- Residential Solar PV Installation
- Commercial & Industrial Solar Installation
- Home Energy Audits
- Proposal And Cost Benefit Analysis

ZERO ELECTRICITY BILL

Save The Environment
Secure Energy For
Your Home

Free Home
Energy Audit :

8830425574
9960742083

Address : Third Floor, Sairang Apartment, Sect no.4,
Moshi-pradhikaran, PCMC, Pune :- 412105. **Email :** solarbird01@gmail.com

About Us :

Started in 2022, Yourneed Solution Solar Energy has been at the forefront of providing trusted rooftop solar solutions, and has successfully delivered more than 130 residential solar rooftop installations in the country till date.

Vision and mission :

Yourneed solution Solar will design and deliver quality affordable, easy to procure and easy to maintain solar power and solar thermal solutions to domestic, commercial and industrial customers to help them offset costs incurred by deploying conventional, costlier energy resources and build a greener Tomorrow.

Why Choose Us?

Making a Sustainable Difference !

We strive to build a sustainable future and pave the way for growth, demonstrating unmatched excellence, integrity, and constant development.

Unprecedented Pre-Sales Support

Our team of experts makes sure to support; our customers throughout their journey of switching to Solar. From educating about the benefits of Solar Energy to advising about the best solution for them, we help our customers secure the best value for their money

Constant Development

Providing better value to our customers by continuously improving quality and service is in accordance with our futuristic approach towards business. We support the free flow of ideas and creativity and constantly focus on unconventional thinking.

Innovative Solutions

YNS Solar Solutions deliver the highest energy production, high performance, and unmatched reliability. We make sure that you get total control and visibility over your energy use.

Bank Financing

When it comes to bank financing solutions, we offer our unprecedented support and guidance all along the way. Our experts help clients come to an agreement with the bank to ensure smooth loan processing and repayment.

Upgradation Services

Do you already have Solar installed at your place, but it isn't enough? We also offer up-gradation services which entail evaluating your energy needs and providing you with an upgrade.

Energy Audit

Our team of experienced professionals assesses your Solar Energy requirements free of cost as part of our energy audit. It helps us analyze your energy flows to identify; all possible opportunities to reduce your Carbon Footprint and energy expense.

After-Sales Support

Our after-sales support team keeps in close contact with our customers to ensure that their system runs smoothly.

Our Services

We Are the Best in Business !

Whatever your unique solar energy needs, YNS has a solution. Our robust portfolio provides an impressive array of powerful, clean solutions. Every service is designed - for maximum savings, optimal performance, long-term reliability, and sustainability.

Engineering, Procurement & Construction (EPC)

YNS provides customized turnkey Solar Solutions. Our experts undertake detailed feasibility analysis to design robust, optimized, and complete Engineering, Procurement, and Construction (EPC) Solutions.

Operations And Maintenance (O&M)

Keeping your Solar Panels at peak efficiency ensures maximum return on investment. Solar Panels that are properly maintained can last for many years. YNS also provides operations and maintenance and Solar asset management and monitoring services.

Power Purchase Agreement (PPA)

A Solar Power Purchase Agreement (PPA) is a financial agreement - where we arrange for the design, permitting, financing, and installation of a Solar Energy System on a customer's property. YNS, through its JV Entity Prism Energy, sells the power generated to the customer at a rate that is typically lower than the utility's retail rate. PPAs typically range from 10 to 25 years, and the developer remains responsible for the operation and maintenance of the system.

Build-Operate-Transfer (BOT

Under Build-Operate-Transfer (BOT) contract, we provide and install the plant and include an operating service package. The plant usually remains the property of the customer, and they purchase electricity produced. They take over operations of the plant after a pre-arranged span of time.

PM Surya Ghar Muft Bijli Yojana Is a Government Scheme

that aims to provide free electricity to households in India. the scheme, households will be provided with a subsidy to install solar panels on their roofs. The subsidy will cover up to 40% of the cost of thesolar panels. that aims to provide free electricity to households in India.

RESIDENTIAL SOLAR SUBSIDY

- 1Kw :- 30,000
- 2Kw :- 60,000
- 3Kw :- 78000

Subsidy For Group Housing Society 18,000 Per KW.

REQUIRED DOCUMENTS:

1) Adharcard
2) Electricity bill
3) Cancelled Cheque
3) Mobile Number
4) Email ID

SCHEDULE OF PAYMENTS:

1) Order Confirmation 20% Token Amount.
2) 70% Before dispatch of Material
3) 10% After Successfully Commissioning and Testing Of Project Before Installation Of MSDECL Meter.

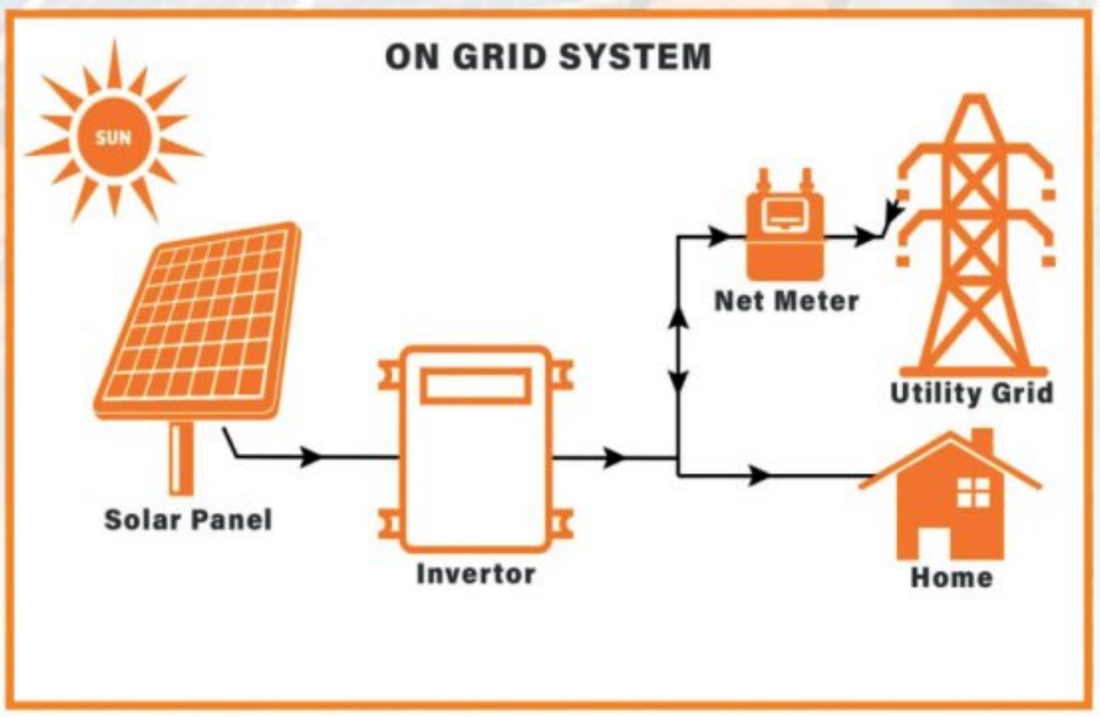
Benefit of solar Energy :

- Free Electricity For household.
- Less Dependency on Grid
- Reduced Carbon Emissions
- Environment Impact
- Energy Independence
- payback in 3 To 5 Years
- Net metering
- Low Maintenance
- plant Life of 25 Year And More

Types Of Solar System

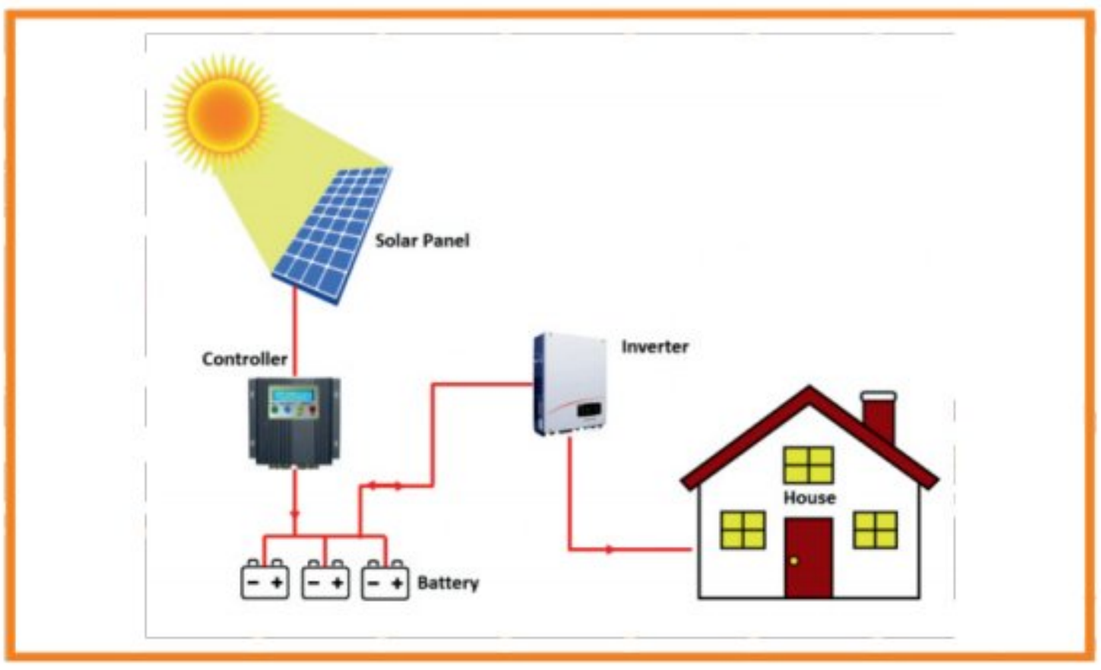
- **On Grid Solar System**
- **Off-Grid Solar System**
- **Hybrid Solar System**

How Do Works On-Grid Solar System



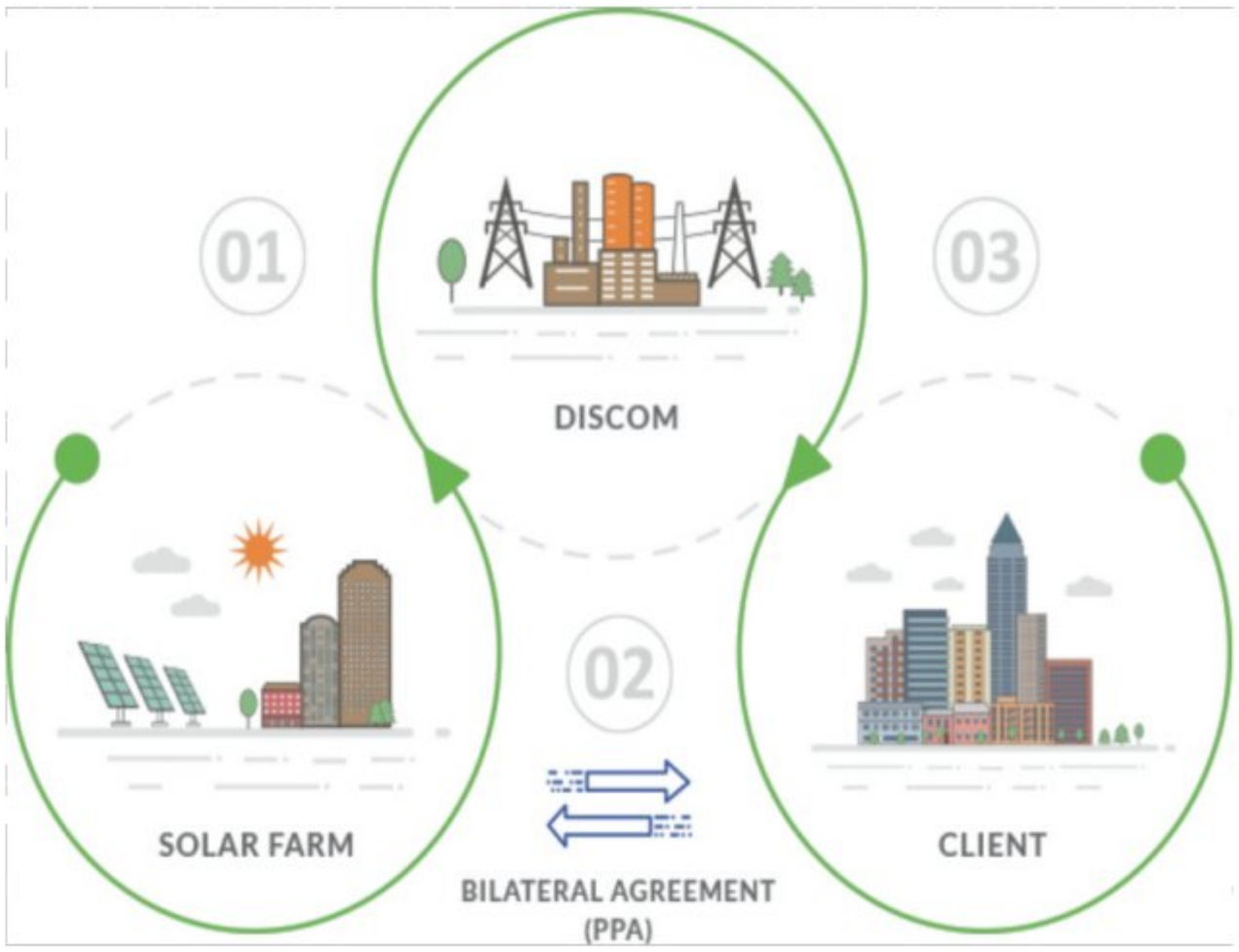
Solar panels absorb sunlight and convert it into DC electricity. The amount of energy generated depends on the sunlight available and the efficiency of the panels. The inverter takes the DC electricity generated by the panels and converts it to AC electricity, which is compatible with your home's electrical systems and appliances. The AC electricity flows into your home and powers the appliances & lighting, reducing your dependence on grid power. Net Metering : If the solar panels generate more electricity than the home consumes, the excess energy is sent to the grid through the net meter.The net meter tracks how much energy is exported to the grid, & this value is credited to your utility account. During the night or when solar generation is low, you draw power from the grid, and the meter records that too. The net meter calculates the difference between the energy you produce and the energy you consume. At the end of the billing cycle, you are billed for the net consumption, which cansignificantly reduce your electricity costs.

How Do Works Off-Grid Solar System



Solar panels are installed in a location where they can receive maximum sunlight. The panels convert sunlight into Direct Current (DC) electricity. The charge controller ensures that the power from the solar panels is sent to the battery bank without overloading or damaging the batteries. It manages the flow of electricity, preventing overcharging and ensuring the battery bank is charged efficiently. Excess electricity that is not immediately used by the home or business is stored in the battery bank. This stored energy is crucial for providing power during times when solar panels are not generating electricity, such as at night or during overcast conditions. The size and capacity of the battery bank determine how much energy can be stored for future use.

How Do Works Open Access Solar System :



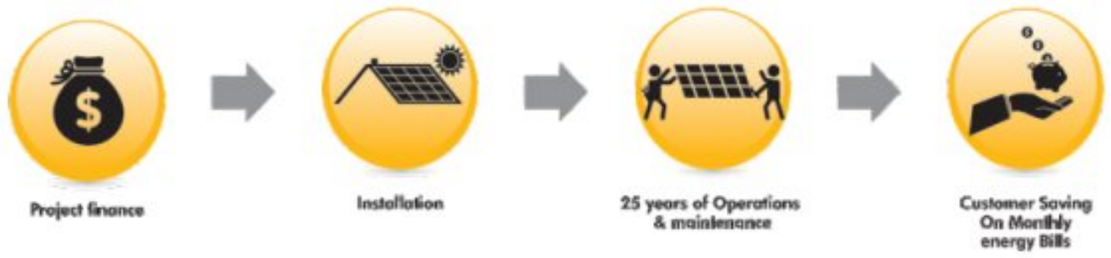
Solar power through Open Access is an arrangement where power producer establishes a solar power plant at an appropriate location and signs a medium/long-term power purchase agreement with a consumer.Open Access enables large power consumers with more than 1 MW connected load to buy relatively cheaper power directly from power producers (open market). While, conventional consumers do not have choice except the AREA DISCOM for electricity supply & have no control over the rate. The electricity act 2003, enabled consumers with more . than 1 MW of sanctioned load to buy electricity directly from power producers, pay some duties and taxes and reduce cost of power

Benefits of Open Access Solar Power Plant

1) This is a lucrative deal for high energy consumers who are short on space.
2) Capex Open Access is like your own separate business. Because your business will not have any impact on it in the future.
3) You can also sell the surplus generated energy in Open Access to Mahavidaran, Open Bidding or to individual users (Industrial, Commercial, Residential, Agricultural) whose load is more than 100 KW.
4) Open access solar power can help protect businesses from rising energy costs and inflation for 25–30 years.
5) Open access solar power can help businesses source a large portion of their power from renewable sources.
6) Solar power is a clean energy source that can help businesses reduce their large scale of carbon footprint
7) Timely cleaning and maintenance is easy as the open access project is installed on the ground.

Opex Model (Build-Own-Operate) :

Avoid the capex and the performance risk. Under this model, you only pay for the energy generated, typically 20-40% cheaper to grid electricity tariff with zero investment on the asset, thus saving money in the process. Operation and maintenance will be handled by us. Sign a Power Purchase Agreement (PPA) with us to save on your power cost.

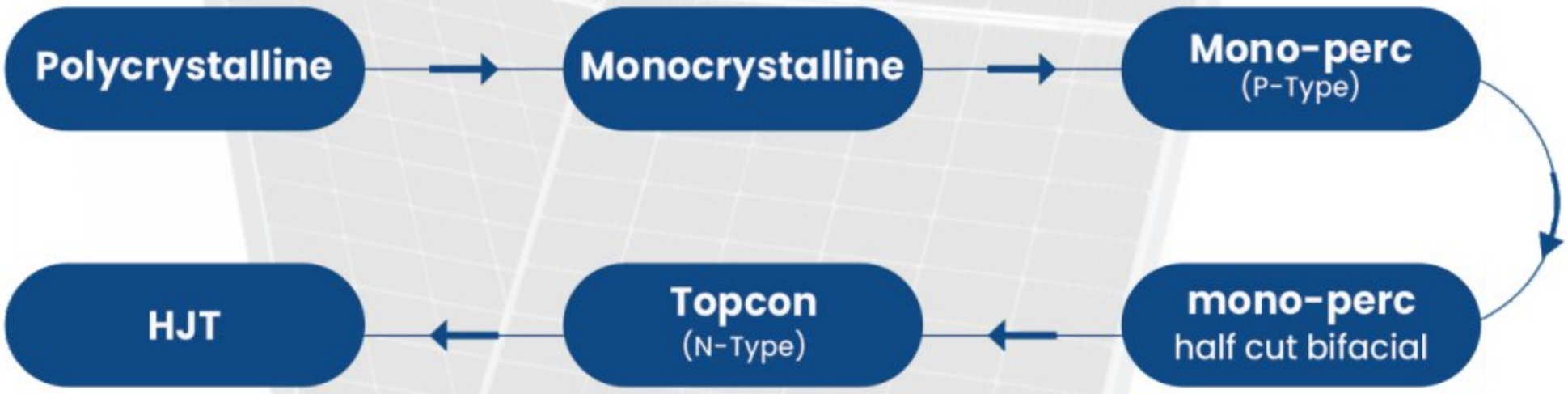


Capex Model (My Solar Plant) :

Uratom Solar will install the solar power plant, and you take the asset ownership. Post installation, our expert engineers will ensure your solar energy operations run efficiently under an operation & maintenance agreement.

Types Of Solar Panel

A solar panel is a device that converts sunlight into electricity by using photovoltaic (PV) cells. PV cells are made of materials that produce excited electrons when exposed to light. eq.Silico, Boron, phosphate . The electrons flow through a circuit and produce direct current (DC) electricity, which can be used to power various devices or be stored in batteries. Due to advanced technology day by day drastic changes are made in it to increase efficiency and durability some of which are as below.



Available Brands

adani · UTL SOLAR · vikramsolar (CREATING CLIMATE FOR CHANGE) · WAAREE (One with the Sun) · navitassolar (conserve | sustain | flourish)

Types of Inverter

- **PWM :-**Pulse Width Modulated inverters PWM is an old technology and its efficiency is somewhat low . Efficiency Above 80% PWM inverters control the voltage and frequency of the output power by modulating the width of the pulses in the wave form . They are simpler and less expensive compared to MPPT inverters However, PWM inverters are less efficient than MPPT inverters, especially when the solar panel system experiences varying sunlight conditions.

- **MPPT :-**- Maximum Power Point Tracking , MPPT is a new technology and its efficiency is somewhat lower than RMPPT . Efficiency Above 90% MPPT inverters use a more advanced algorithm to maximize the power output of the solar panels by continuously tracking the maximum power point (MPP) of the solar array . MPPT inverters are generally more expensive but provide higher efficiency They adjust the voltage and current to ensure the solar panels operate at their maximum efficiency under changing environmental conditions

- **RMPPT :-**- Rapid Maximum Power Point Technology . RMPPT is a patented technology owned by UTL Solar . Efficiency Above 96.9% RMPPT inverter Better performance, especially in situations where there are fluctuations in sunlight intensity . RMPPT inverters are generally more expensive Than MPPT but provide higher efficiency

Available Brands

Growatt (powering tomorrow) · UTL SOLAR · SUNGROW (Clean power for all) · WAAREE (One with the Sun) · solis

Solar Structure

A GI (Galvanized Iron) solar structure is a robust and corrosion-resistant framework used to mount solar panels. These structures are made from galvanized iron, which undergoes a zinc coating process to protect the metal from rust and environmentaldamage. GI solar structures are essential for ensuring the stability, longevity, and optimal orientation of solar panels, allowing them to capture maximum sunlight. They are commonly used in rooftop, groundmounted, and carport solar installations due to their durability and ease of maintenance.

- **Column Size:-75*75*2mm.**
- **Rafter Size:-75*75*2mm.**
- **Perlin Size:-40*40*2mm.**

What is ACDB & DCDB :-

1) ACDB: AC circuit breakers or AC isolators rated for the system voltage and current capacity are used for overload and short-circuit protection. Surge protection devices (SPDs) may also be included. 2) MCB Is Schneider.

2) DCDB: DC circuit breakers or DC isolators rated for the DC voltage and current capacity of the solar panels or strings are essential for safety and system protection. DC surge protection devices are also commonly integrated

Earting Arrester

> AC Wire Polycab

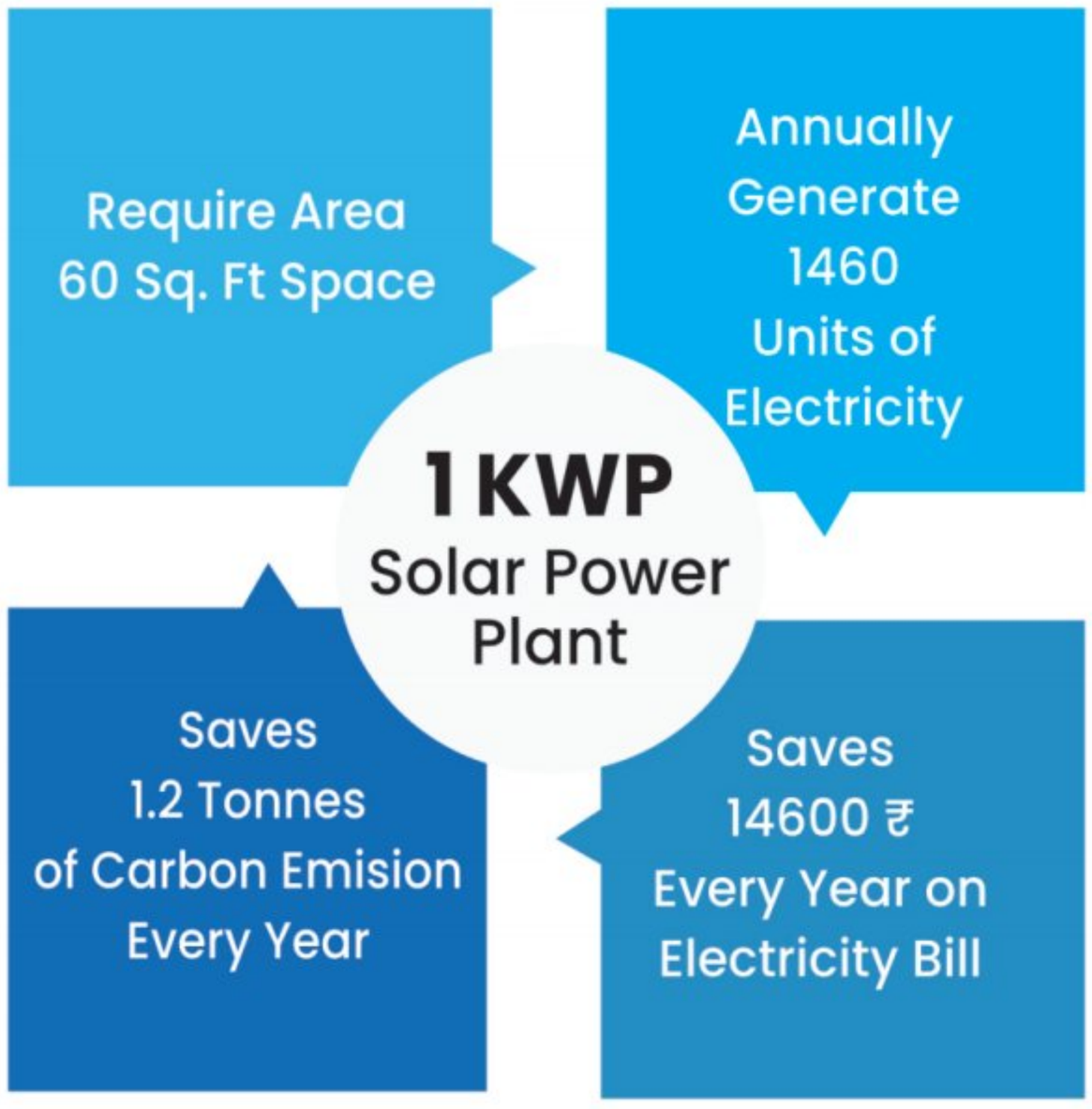
When selecting materials such as earthing components and surge protection devices for solar installations, it's important to consider factors such as local regulations, environmental conditions (like exposure to lightning), system voltage, and equipment specifications . Working with certified installers and consulting relevant standards can help ensure compliance and safety

Wiring

When selecting materials such as earthing components and surge protection devices for solar installations, it's important to consider factors such as local regulations, environmental conditions (like exposure to lightning), system voltage, and equipment specifications . Working with certified installers and consulting relevant standards can help ensure compliance and safety

WORKING FLOW

KEY HIGHLIGHT OF SOLAR INSTALLATIONS



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