## **TATA POWER SOLAR**



## Your Rooftop, Your Savings Account

Rs. 50,000\* Annual Reduction in Your Electricity Bills for Next 25 Years



Trusted, dependable and long-lasting systems

## **ROOFTOP SOLAR**

Your Ideal Investment For Your Idle Roof

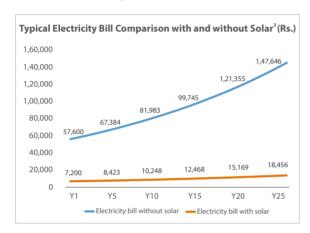
\* Mentioned for a peroid of 1 year for 5 kW system @ Rs. 7.2 per unit tariff

#### WHY USE SOLAR POWER?



## Approx Rs. 10 LAKH' Saving

- Payback period of 5-6 years
- Grid independence against rising tariff
  - » Electricity tariff has increased by more than 50%<sup>2</sup> in 5 years time in many states





# **150 Tonnes**<sup>4</sup> CO<sub>2</sub> Emission Mitigated

Equivalent to planting of 250 Trees<sup>4</sup>



#### **Minimum Maintenance**

Solar rooftop system has no moving parts



#### **Scalable Design**

For easy upgrade & future expansion requirements

#### **MANUFACTURING EDGE**

## **High Quality Materials**

- Only carefully selected and high quality raw materials and components go in to our modules
- Stringent incoming quality checks and vendor evaluation

## **Excellent Workmanship**

- Use of L-bend output busbar advantageous in terms of protection against hotspot failure
- Extreme focus on quality Designed to deliver beyond the lab tests

## **Best-In-Class Equipment**

- High quality best-in-class equipment and automation
- Advanced auto-tabber and stringer (closed loop soldering; 1800 cells/hr and above)

## **Quality Strengths**

- High Quality backsheet ensures excellent resistance against harsh environment and low water vapour permeation
- Potted J-Box with IP 67 rating reduces hot spot risks and ensures excellent ingress protection performance





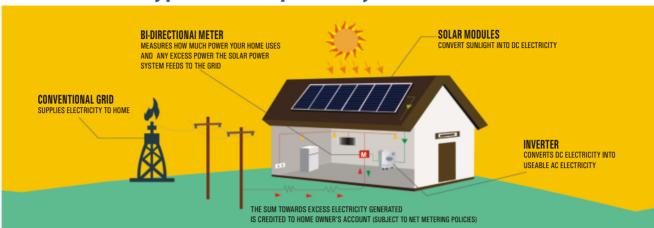




- 1. Calculated for a 5 kW rooftop solar system assuming 1,400 units generation per kW per year. Electricity savings calculated @Rs 7.2 / unit over project lifetime of 25 years
- 2. Year 1 to Year 6 refer to FY 2011 to FY 2016. Average tariff indexed to 100% for Year 1 and used across customer segments for the geographies Delhi, Rajasthan, Gujarat, Maharashtra, Andhra Pradesh and Kerala. (Source: Sigma Insight)
- 3. Indicated for a 5 kW solar rooftop system assuming 1400 units generation per kW per year and consumption of 8,000 units per year. Tariff assumed at Rs 7.2/unit, with increase of 4% each year till 25th year.
- 4. Mentioned for 5kW system over 25 years lifetime. (Source: MNRE Website)

#### GRID-TIE SOLAR ROOFTOP SYSTEM

## **A Typical Rooftop Solar System Installation**



### **Solar Modules**

Solar module refers to a set of photovoltaic (PV) cells electrically connected and mounted on a supporting structure that converts solar energy into direct current (DC).



Manufactured in India on leading edge module production line using world class processes



Reliability under extreme weather conditions, certified to withstand snow loads of up to 5,400 Pa



Peace of mind guaranteed by Tata Power Solar; 25 year linear module warranty



Reduced risk of failure warranty; claims of less than 0.07% over two decades

Above mentioned features are valid for Tata modules only

### **Grid-Tie Solar Inverter**

A solar grid-tie inverter converts the variable direct current (DC) output of a photovoltaic (PV) solar module into a utility frequency alternating currect (AC) that can be fed into a power grid or used by a local electrical network.

TPS uses best-in-class grid-tie inverters that have special functions adapted for use with PV solar modules.



IP-65, environmental protection rating, can withstand extreme weather conditions



High yield output with maximum efficiency of over 97%



Ground fault monitoring



Anti-islanding feature - internal DC switch enabling auto shut down upon loss of utility supply (mandatory requirement for safety reasons by NEC - National Electric Code)



VDE / Golden Sun / IEC certified



Remote monitoring system with Ethernet / RF technology / WiFi\*

# WHAT MAKES US THE TRUSTED NAME IN SOLAR POWER SOLUTIONS?



3+ decades deep domain expertise -

Only Indian solar EPC company to complete entire lifetime of a solar project



Partner of choice for 15,000+ residential & 27,000+ total customers



24x7 remote monitoring & live data tracking of solar installations



Ranked **No 1 Solar Rooftop EPC player** for **6 years in a row** (2014-2019) by Bridge To India



3.5+ GW of utility scale & **360+ MW of** rooftop projects for a brighter India



Pan India presence with a network of over170 channel partners



**Lifecycle service & support :** Rapid support anywhere through TPS extensive service network



End to end and world class EPC

#### Landmark Installations



**Planet Godrej Society, Mumbai** 



Suvidha Premium Retirement Village, Bengaluru

### **Voice of Customers**

My feeling is that in 5 years time I would break-even as far as my initial investment goes. So, there would be *free electricity for me for almost 20 years*. The best part is that *if I am on vacation, my roof is earning for me.* 



**Dr. Rajeev Goyal** Chest Specialist

Our electricity expenses were coming out to be very high. To reduce the expenditure on electricity, we decided to go for solar. **We are happy that our energy bills reduced substantially** after we switched to solar.



Mr. Amrinder Pal Singh Businessman

## **Our Prestigious Customers**













#### TATA POWER SOLAR SYSTEMS LIMITED

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