

35kW Rooftop Solar System
At
Tajna Shellac, Khunti; Jharkhand



1 PROJECT BACKGROUND

Tajna Shellac was established in the year 1984 by Shri Roshan Lal Sharma who has been involved with shellac since 1952. Tajna is pioneer manufacturers of Bleached Shellac of highest quality in India, as well as Seedlac, Shellac and Lac Dye. Having a worldwide recognition as well as reference, Tajna have won the trust from renowned companies all over the world for the quality of its Shellac and Seedlac and created a brand name called TAJNA.

Observing ever growing electricity tariff/bill and increasing climate concerns, the industry management decided to explore rooftop solar systems. However, the management was a little sceptical about the function of the system, but after a detailed presentation by Sologix Energy, management agreed to install a 35kW on-grid rooftop solar system to reduce the electricity bill and contributing to climate.

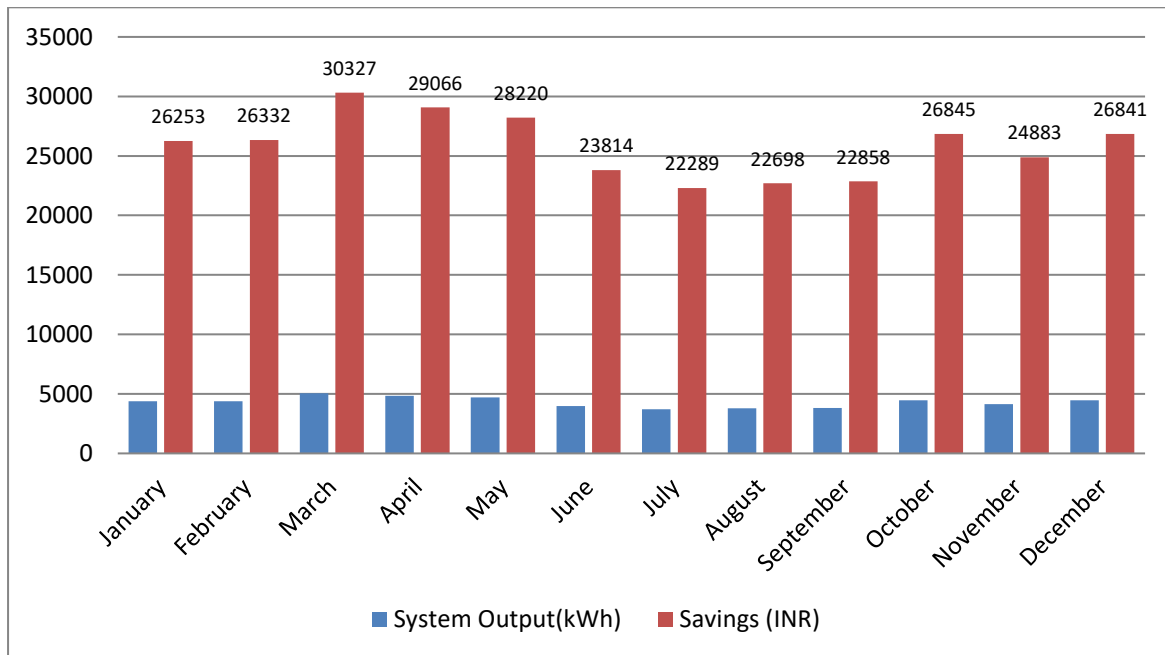
This project consists of 105 number Vikram make solar modules and two ABB make grid-connected inverters. The entire 35 kW system is connected to the JBVNL grid under a net-metering arrangement. The project is to generating approx. 51,000 units of electricity per year. After installation of the system, we are able to reduce our electricity bill up to 25%.

2 PROJECT SUMMARY

Solar System Capacity	35 kW
Roof Area Covered	350 Sq. m.
Project Cost (Complete EPC)	14,70,000 Rs.
Annual Solar Energy Generated	51,000 Units/Year
Saving to Industry	3,10,000 Rs. /Year
Payback Period	5 Years

3 GENERATION & SAVING

Month	System Output(kWh)	Savings (INR)	Emission Reduction (tCO ₂)
January	4375	26253	4
February	4389	26332	4
March	5054	30327	5
April	4844	29066	4
May	4703	28220	4
June	3969	23814	4
July	3715	22289	3
August	3783	22698	3
September	3810	22858	3
October	4474	26845	4
November	4147	24883	4
December	4473	26841	4
Total	51737	310425	47



4 MANAGEMENT SPEAK

Sologix Energy has done excellent work. They have completed the project on time and provided outstanding Operation & Maintenance service, and we are getting excellent output. The plant is performing well, and we are thrilled with our solar system.

Our plant is generating approximately 4,250 units of green energy per month and we are saving 26,000 Rs. /Month. Apart from saving on electricity bills, we are contributing to the environment and society is becoming aware of renewable energy and climate change.

In my opinion, every industry should go for solar installation. This saves money and creates awareness among our society about climate change, global warming, and how solar PV system can help mitigate extreme climatic disasters.