

35kW Rooftop Solar System
At
Raj Ceramics, Hardag, Jharkhand



1 PROJECT BACKGROUND

Raj Ceramics, a unit of Raj Refractories Private Limited, was established in the year 1983 with setting up its manufacturing unit at Hardag, District Ranchi, Jharkhand. In the year 2003, Raj Ceramics was also awarded highest exporter reward from the state government. Equipped with all latest manufacturing facilities, services and excellent research and development, Raj Ceramics produces wide spectrum of sophisticated refractories.

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.

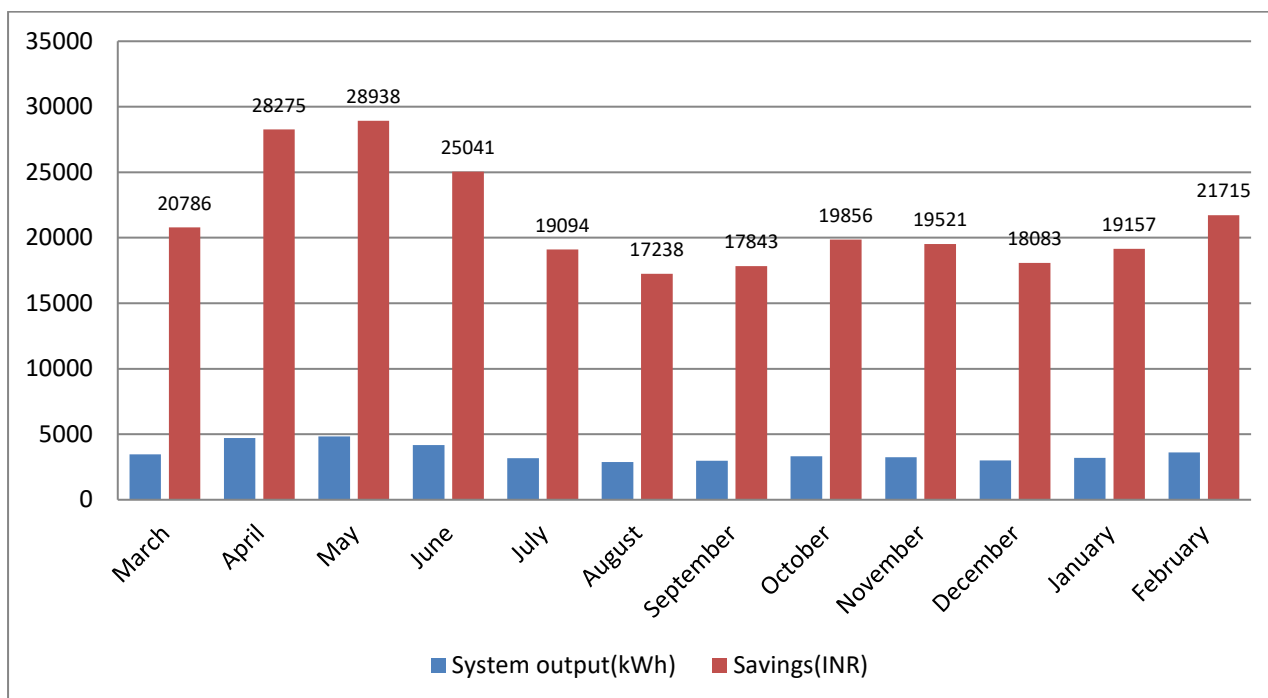
This project consists of 105 number Vikram make solar modules and ABB grid-connected inverters. The entire 35 kW system is connected to the TSUILS grid under a net-metering arrangement. The project is to generating approx. 42,000 units of electricity per year. After installation of the system, we are 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)	15,00,000 Rs.
Annual Solar Energy Generated	42,590 Units/Year
Saving to Industry	2,56,000 Rs. /Year
Payback Period	6 Years

3 GENERATION & SAVING

Month	System output(kWh)	Savings(INR)	Emission reduction(tCO ₂)
March	3464	20786	3
April	4712	28275	4
May	4823	28938	4
June	4173	25040	4
July	3182	19093	3
August	2873	17238	2
September	2973	17843	3
October	3309	19855	3
November	3253	19520	3
December	3013	18082	3
January	3192	19157	3
February	3619	21714	3
Total	42591	255546	36



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 3,500 units of green energy per month and we are saving 21,000 Rs. /Month. Apart from saving on electricity bills, we are contributing to the environment and our society 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.



Aditya Biyani
Director- Raj Ceramics