



40kW Rooftop Solar System At Dayanand Public School, Jamshedpur, Jharkhand







1 PROJECT BACKGROUND

Dayanand Public School was established in the year 1989 and is managed by **Jamshedpur Arya Samaj Trust**. The school was set up with a vision to impart education to students irrespective of religion, caste, social status, creed or place of origin. It aims at giving to the world well balanced, healthy and strong citizens with a command

Observing ever growing electricity tariff/bill and increasing climate concerns, the school 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, School management agreed to install a 40 kW on-grid rooftop solar system to reduce the electricity bill and contributing to climate.

This project consists of 119 number Vikram make solar modules and one Delta make grid-connected inverters. The entire 40 kW system is connected to the TSUILS grid under a net-metering arrangement. The project is to generating approx. 58,000 units of electricity per year. After installation of the system, we are able to reduce our electricity bill up to 90%. We are only paying demand charges now.

2 PROJECT SUMMARY

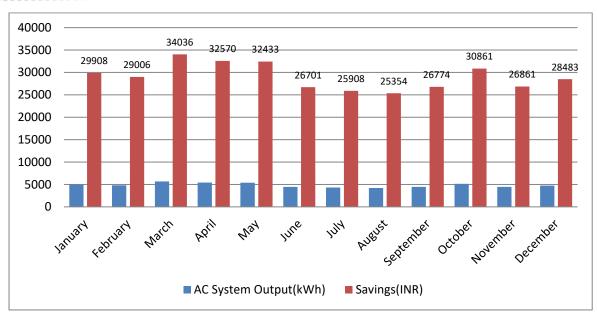
| Solar System Capacity | 40 kW |
|-------------------------------|--------------------|
| Roof Area Covered | 400 Sq. m. |
| Project Cost (Complete EPC) | 16,80,000 Rs. |
| Annual Solar Energy Generated | 58,000 Units/Year |
| Saving | 3,50,000 Rs. /Year |
| Payback Period | 5 Years |

3 GENRATION & SAVING

| Month | System Output(kWh) | Savings (INR) | Emission Reduction (tCo ₂) |
|-----------|--------------------|---------------|--|
| January | 4985 | 29908 | 4 |
| February | 4834 | 29006 | 4 |
| March | 5673 | 34036 | 5 |
| April | 5428 | 32570 | 5 |
| May | 5406 | 32433 | 5 |
| June | 4450 | 26701 | 4 |
| July | 4318 | 25908 | 4 |
| August | 4226 | 25354 | 4 |
| September | 4462 | 26774 | 4 |
| October | 5144 | 30861 | 5 |
| November | 4477 | 26861 | 4 |
| December | 4747 | 28483 | 4 |
| Total | 58149 | 348893 | 52 |







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 5,000 units of green energy per month and we are saving 30,000 Rs. /Month. Apart from saving on electricity bills, we are contributing to the environment and our students becoming aware of renewable energy and climate change.

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



Mrs. Swarna Mishra Principal Dayanad Public School,