



1. Documents on amount of energy saved and reductions of costs on Energy used after the installation of Solar, Wind and LED based on the energy audit submitted, attested by the Principal.

The energy audit, done by Renq Power Solutions India, of Sacred Heart College suggested (i) to replace existing lighting to LED based lighting as well as switch (ii) to solar power generation to be more sustainable. In compliance with the suggestions, the following actions were taken:

(i) LED fixtures

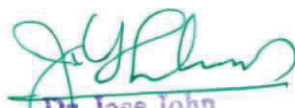
470 lighting fixtures (out of the total 1448) were replaced so far. The resultant energy savings is tabulated below.

Energy Savings				
Item	No.	Load		Reduction (W)
		Old fitting (W)	New fitting(W)	
Tube light	450	40	18	9900
Lamp	20	60	9	1020
			Total	10020

Evidently, 68 percent of the lighting fixtures are yet to be replaced. Moreover our institution is functioning mostly during day hours, during which these lighting fixtures are sparingly used. Consequently, a noticeable reduction in the electricity consumption due to the LED lighting fixtures cannot be expected.

As we have indicated in the SSR, the college is in the process of replacing our existing lighting (when they need a replacement) with LED lights as well as ensuring that all new lighting fixtures/equipment installed are energy efficient.

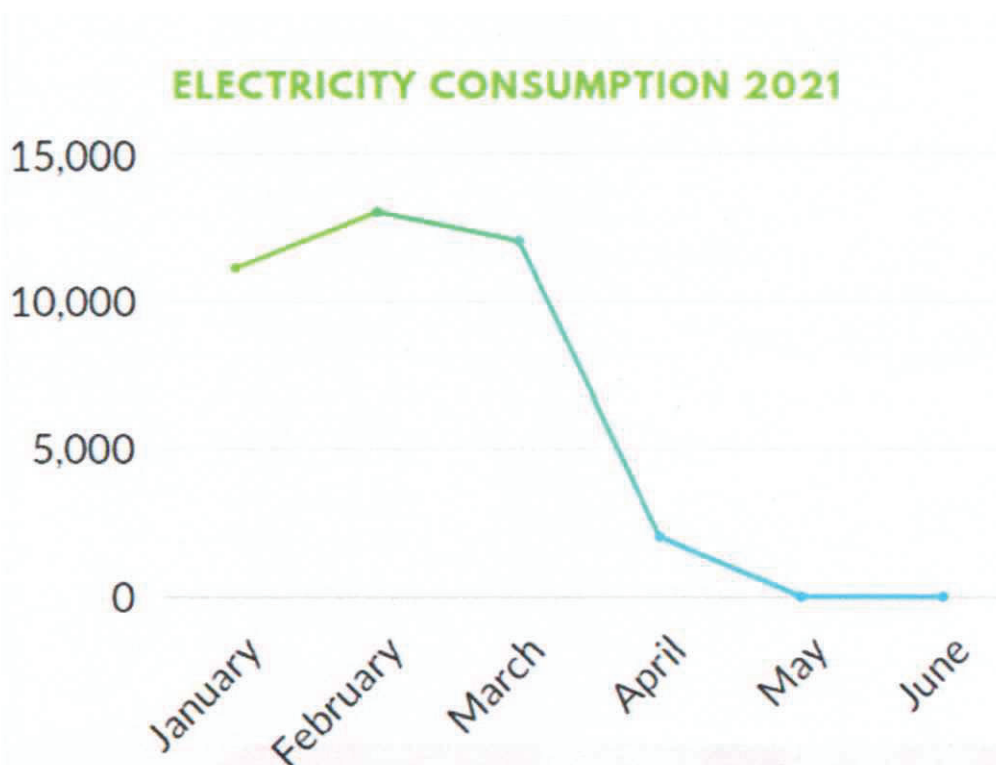



Dr. Jose John
Principal in Charge
Sacred Heart College (Autonomous)
Thevara, Kochi 682 013



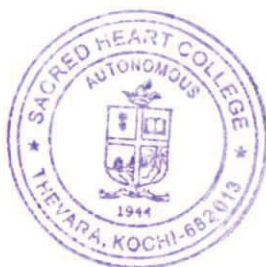
(ii) Solar power plant

An on-grid solar power plant was installed and is now fully functional, since April 2021. At the moment the net energy consumption of the college stands at 0 kWh, as more energy is supplied to the grid, than what is consumed. Monthly energy consumption before and after the commissioning of solar power plant is given below. Evidently net power consumed has become 0 from about 11,500 units.



(iii) Wind based power plant

Our wind based power plant is a small demo unit, to showcase the potential for such systems. At the moment, it is used to charge cells used in Physics lab and for experiments on power supplies.



Dr. Jose John
Principal in Charge
Sacred Heart College (Autonomous)
Thevara, Kochi-682 013