

Sandhya Sanwardhan Sanstha

Solar Power Project:

1] Need defined:

Sandhya Sanwardhan Sanstha is a non aided and purely charitable Institute committed to the cause of mental disability since 1993. It provides services of special education, vocational training, developmental therapy and rehabilitation services to mentally challenged children from a one acre campus of its own. The one acre lush green campus has a ground plus one floor building which is barrier free and has all amenities like elevator, water cooler, fridge, air coolers, meeting halls with LCD projector etc. This building contains 26 rooms and two big halls and kitchen and dining hall for students.

2] Power requirement:

With such a big campus and infrastructure the power requirement currently stands at about 1100 to 1200 units per month i.e. about 40 units per day. Thus the yearly energy bill is approximately Rs. 1.00 lakh to Rs. 1.35 lakhs since the bill comes under higher tariff slab. Further, it is likely to go up in the coming years looking to the ever escalating power rates.

3] Solution as solar power:

With this background we thought solar power is the long term answer to our power requirement. Incidentally our building has a huge and clear, open terrace which can accommodate requisite number of roof top solar panels. We propose to have a grid based solar power system since our energy requirement is mostly for day time. We hope to generate extra power to feed in the grid so as to have night time power need free of cost.

Projections:

- a] Our need --- 14 kw
- b] Power generated by 100 sq.ft. solar panels 1 kw / 4 units per day with 85% efficiency.
- c] Terrace available with us: 10,000 sq.ft.
- d] Required terrace for 14 kw : 1400 + sq.ft.
- e] Per day power units generated : 50 to 56 units
- f] Rate for 1 kw : Rs. 63000/-
{ this rate is all inclusive with installation, material, net meters and permission from MSEB as well. }
- g] The total cost for 14 kw : Rs.8.82 lakhs.**

The above financial figures are tentative and likely to vary by 10% or so.

Appeal: *If solar power is harvested it will not only be a green initiative but will also save approximately Rs 1.35 lakhs per annum and thus likely to recover this investment in about 6 years time. Since the solar power system has 25 years maintenance free life span the remaining 20 years will be cost free. Since Sandhya is non aided and not for profit organisation it is more prudent for us to try to control our revenue expenses and thus we feel this solar power is most logical non conventional energy source.*

Sandhya is a purely charitable and not for profit organisation and is non aided. The only funding source is donations from philanthropic people and organisations. We thus appeal to our supporters and donors to help us in installing this green energy.