

Network Techlab's energy efficient solution not only saved the electricity charges but also gave an alternate source of power supply to the Institute.



Organization

Kapol Vidyanidhi International School

Location

Kandivali, Mumbai, Maharashtra.

Domain

Educational

Solution Offered

20Kw On Grid Solar Power Plant

Technical Specifications

- The entire panels were installed in the parking shed in south direction. As per the latitude of the location, we have installed the panels at 170 angle to gain the maximum efficiency from the solar light.
- The complete return on Investment (ROI) was made is less than 3 years, whereas the life span for solar is more than 25 years.

Kapol Vidyanidhi goes Green with the help of Network Techlab (I) Pvt. Ltd.

Overview

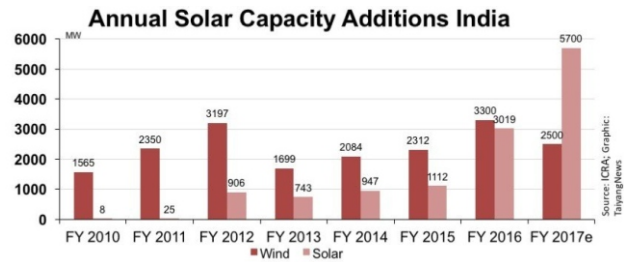
With the drastic rise in the prices of the electricity bills and an over dependence on the fossil fuels, Kapol Vidyanidhi, were facing a dual challenge of downsizing the electrical budget and also coming up with an alternative form of energy which will save the environment. After visiting the proposed site and analyzing the issue, Network Techlab came up a better deterrent which would enable the smoother functioning of the day to day activities without hampering the environment. We proposed Green Energy, which would enable the entire load (20Kw) to be run on Solar Energy.

Challenges

- How to reduce the electrical bill?
- To promote Green energy in school's Educative environment.
- Setup of the solar panels in school.

Solutions

- To find a cheaper, more efficient, more sustainable and an eco-friendly alternate.
- Providing Solar energy to promote renewable source of Green energy.
- Our experienced team came up with an innovative solution of installing the Solar panels on the newly constructed roof of the bus parking, serving dual purposes of providing bus shade and solar mounting structure.



(Figure1)

Why was there a need for Green/Solar Energy?

In today's world there is lot of usage of Fossil Fuels such as Coal, Oil, Natural Gas etc. These fossil fuels are perishable resources. We have to find some alternative source which is renewable and infinite. Energy sources such as Solar, Thermal, Wind, Biomass, Hydropower etc. are some of the sources which can help in safeguarding the environment and providing a better future for the coming generations. The clean energy sector connected 6.9 GW to the national grid in the last fiscal year. The most dominant renewable source continues to be wind power – with at total share of 62.6%, followed by solar at 15.8%. The share of renewable energy in overall generation capacity of India went up to 14.1% in 2015-16, increasing from 13.2% in 2014-15. Solar, which forms a major chunk of the total target of 175 GW of renewable energy capacity addition by 2022, added 3,019 MW in the last fiscal year. This, says ICRA, is 171% more than the capacity addition of 1,112 MW in the previous fiscal year. (Figure1)

Conclusion

With the proper implementation of the solar solution the electricity bill was reduced to ZERO and the institute had to pay only the fixed amount charges as levied by the Government of INDIA. They didn't consume single unit of ELECTRICITY from the Utility Board for the past 6 Months.

Our energy efficient solution not only saved the electricity charges but also gave an alternate source of power supply to the school.