Dilli Haat goes Green with 98% Solar Power



- Quick Facts | Location New Delhi
 - Capacity 140.8 kWp
 - ▶ Type of System Spread across multiple RCC roofs
 - ▶ Annual reduction in energy bills INR 9.7 lacs
 - ▶ Carbon Dioxide abated 186 tons of CO₂ per annum
 - ▶ Date of Commissioning 3rd August 2017

Overview

CleanMax Solar has commissioned a 140 kWp rooftop solar plant across six buildings at the food and craft bazaar, Dilli Haat, in Pitampura, a popular tourist attraction in New Delhi. This project was a part of the 2.5 MW order secured with the Delhi Government's power generation arm, Indraprastha Power Generation (IPGCL).

The project operates on a build-own-operate and maintain (BOOM) model. This means that CleanMax will continue to operate and maintain the project over the PPA tenor and Dilli Haat will procure the renewable power at a tariff determined through the IPGCL tendering process.

The solar plant generates a total of 1.97 lakhs units of electricity through the year and meet's a whopping total of 50 percent of the power saving per unit which helps save INR 9.7 lakhs per annum.

Highlights

- This project is part of the 2.5 MW order secured with the Delhi Government's power generation arm, Indraprastha Power Generation (IPGCL).
- The solar plant is expected to abate CO₂ by 186 tons per annum.
- The project helps the taxpayers save INR 9.7 lakhs per annum.

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Challenges

The disparity between the time of solar production and consumption

Dilli Haat being a venue of crafts, music, dance and cultural festivals experiences significant load consumption in the evening and night time. Solar energy generation, however, is concentrated during the middle of the day. This timing mismatch between generation and demand for electricity made it critical to design the plant with energy banking system which will give the highest return.

Solution

Matching power supply and demand through Net metering

The timing mismatch between generation and demand for electricity meant the project could realize the benefits from net metering. Net metering helps the Dilli Haat site and supports the DISCOM (the state electricity distribution company) by providing solar power during the daytime when it's needed in the grid for nearby commercial and residential consumers.

Setting up net metering requires an application process and a feasibility analysis. The application is submitted for approval to the local DISCOM and if it meets all requirements, a net metering connection agreement is executed between the DISCOM and the customer. The process took only about a month to complete for the Dilli Haat project, while typically it can take closer to 45 days.

this renowned tourist destination green and sustainable.

Outcome

The solar plant is now connected to the grid of TATA Power Delhi Distribution Limited (the local DISCOM). The Dilli Haat project has achieved cost savings of 50% on electricity cost which amount to INR 9.7 lakhs per annum. The project has abated 186 tons CO2 per annum which is equivalent to abating greenhouse gas emission from 36 passenger cars driven for an entire year.

About CleanMax



CleanMax is the sustainability partner for India's leading corporates. Headquartered in Mumbai, we are the largest provider of solar power to commercial and industrial customers.

The company develops projects on turnkey basis, providing cheaper-than-grid solar power without any upfront investment from its customers. With a highly skilled in-house team, CleanMax operates across India, Middle East and South East Asia.

Our track record with India's top companies has made CleanMax a preferred partner across sectors such as Automotive, Pharmaceuticals, Food & Beverages, Information Technology, Education and many other industries. We also partner with some of India's leading government institutions and top universities

About Dilli Haat

A 6-acre open-air market, Dilli Haat is one of the biggest and popular markets of Delhi. Operated by the Delhi Tourism and Transportation Development Corporation (DTTDC), it is a permanent market. The complex has been built as a reclamation project and sees craftsmen from all over India displaying and selling their artistic wares. In fact, over the years, this shoppers' paradise, has become a cultural hub in the city.