

The solar journey of Kempegowda International Airport (BIAL)

Quick Facts

- ▶ Location: Bangalore, Karnataka
- ▶ Capacity: 500 kWp
- ▶ Type of system: Mix of RCC and metal roofs
- ▶ Annual generation: 7.5 lacs units
- ▶ Carbon dioxide abated: 708 tons annually
- ▶ Date of commissioning: March, 2016

Overview

Taking a step forward as a part of PMO's 100 GWp solar target by 2022, Kempegowda International Airport, Bengaluru (also known as Bengaluru International Airport Ltd – BIAL) became the first airport in Karnataka to go solar. 'Sustainable progress' is the thought that sets the direction for the airport. As a role model for sustainable progress, the journey has been marked by measurable achievements and inspiring stories. One such story includes BIAL adopting solar power. It marked a completely new journey for BIAL as it has gone green, without any capital expenditure, while saving electricity costs at the same time.

BIAL was actively looking to partner with a solar developer to meet its objective of building a sustainable airport. Around the same time, Solar Energy Corporation of India (SECI) empanelled CleanMax Solar, to help develop rooftop solar power plants for government installations. SECI referred CleanMax Solar for its superior quality and quick installations timelines, which laid the foundation of a bright journey. CleanMax Solar has developed the 500 kWp on-site plant at the airport, as a part of the commitment and arrangement with SECI.

Airport being a sensitive area (security-wise and constant mass movement), required very strict regulations to be followed while working. It posed challenges for CleanMax Solar Engineers in terms of limited access to buildings, the upper cap on the number of people working on site, restricted movement of material within the premises etc. CleanMax Solar overcame these challenges by highly efficient workers, who completed the construction within 2 months of signing the Power Purchase Agreement (PPA).



Challenges

Safety Measures

- ▶ Installing solar in a high security and sensitive area
- ▶ Maintaining and improving aesthetics of the airport
- ▶ Achieving significant carbon footprint reduction

Solutions

▶ Going green with immediate reduction in electricity bills

The installation happened at 6 different buildings, a combination of RCC and metal roofs. CleanMax helped BIAL convert their 6000 sq. m. idle rooftop to a money-saving piece of land by providing complete turnkey solutions. Under our BOO (Build-Own-Operate) model, BIAL saw a reduction in their electricity bills right from the day of commissioning of the solar plant. BIAL is expected to save more than Rs 20 lac rupees annually and moreover abate 708 tons of CO2 per annum as part of their green mission.

▶ Aesthetically appealing roof with low maintenance

Bengaluru airport is known for its architectural design. The structure creates a grand, dynamic presence and solar power plants seamlessly blend in the grandeur. They add to the overall aesthetics of the airport and need very little maintenance.

Highlights

- ▶ Karnataka's first airport to go solar
- ▶ Remote monitoring system for the plant
- ▶ Energy cost reduction upto Rs 20 lacs annually

About Bengaluru Airport



Kempegowda International Airport is an international airport serving the city of Bengaluru, it is owned and operated by Bangalore International Airport Limited (BIAL), a public-private consortium. BIAL has taken various sustainability efforts to maintain long-term well-being of the community.

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.

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