



A Green Building Initiative of AAI

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The New Integrated Terminal building of Chandigarh International Airport is equipped with modern state of the art facilities, green and well developed landscapes and interior decorated with art, paintings and mural works.

The new Terminal can handle 1600 Passengers (Domestic 575 Pax. Incoming + 575 Outgoing & International 225 Pax. Incoming + 225 Pax. Outgoing) at peak hours, with annual capacity of 4.5 million. Fully Air-Conditioned equipped with modern facilities, 03 nos. Aerobridges, 04 nos. Baggage Carrouseles, 14 nos. Elevators, 06 Nos. Escalators,. The car park has got a capacity for 500 cars, separate provision for VIP car park and Bus parking. Aircraft Parking Main apron and Cargo Apron has got a capacity of 10C Type Aircrafts and 1 E Type Aircraft at a time.

Brief Description of overall strategy, aims and objectives

Airports Authority of India (AAI) had started the construction of new International Terminal Building in Aug. 2012 and completed the same in May 2015 within schedule time with completion cost of Rs. 460.00 Cr. Without any cost overrun and time overrun.

The new Terminal Building was inaugurated by Hon'ble Prime Minister of India on September 11, 2015. In a public rally at Chandigarh, Hon'ble Prime Minister openly praised the new Terminal Building constructed by AAI.

The new Airport was operationalized in record time and smoothly functioning from 19.10.2015.

1. GREEN INITIATIVE

During construction

Minimum environmental impact concept has been followed during construction of New Integrated Terminal of Chandigarh International Airport. Following measures have been adopted :

- Top soil conservation
- Sedimentation channels – for water conservation and ground recharge
- Waste management during construction, separate area for construction waste and segregation of waste as per norms of Griha
- Wheel washing facility to minimize the



- environmental impact of construction
- Acoustic proof Silent diesel Generator sets
- Preservation of trees in the construction area
- Re - plantation of trees
- Jute bag to minimise wastage of water
- Maximise the green area

Various environmental friendly materials used as per green building concept

- Fly Ash Bricks-Around 55 Lakhs
- Double Insulated Roofing System
- DGU & High Performance Glasses
- Low VOC Paints
- Cavity Walls
- Energy Efficient Chillers With 6.3 COP For HVAC
- Energy Efficient Gearless Motors for Elevators
- VFDS For High Capacity Motors
- Led Type Electrical Fixtures
- 600 KLD STP Plant Installed for Treating Sewerage and Waste Water.
- Treated Water from STP Plant will be used for HVAC, Flushing and Gardening Etc.
- Rain Water Harvesting Wells. Sensor Based Plumbing Fittings for Water Conservation.

2. BENEFITS

- The electricity for the entire airport is proposed to be generated through 100% solar initiative for which Chandigarh International Airport Ltd (CHIAL) is shortly putting up 3.0 (three) mega watt solar plant. Therefore entire energy requirement of airport shall be met from green energy without having any dependence on State Electricity Board.
- Due to functioning of STP, the water requirement for maintenance of green area and HVAC etc. will go down as water will be treated before getting reused.

Solar Power Projects at AAI Airports

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Airports Authority of India (AAI) has taken significant strides towards sustainable development and energy neutrality by installing solar power plants at various airports in the country. Wherever feasible, roof top of terminal buildings, office and ancillary buildings are being utilized to harness solar power. In addition, vacant lands at airports are also being used.

Suitable roof tops of airports / units have been identified for solar power projects at 27 airports. 4.8 MWp Solar projects at 13 airports are completed & another 4.9 MWp solar power plant works are in progress at 14 airports. These efforts have been recognised by MNRE and conferred 2nd place to AAI among the PSU's for installation of cumulative capacity of grid connected roof top solar plants in the country.

In a matching response to Prime Minister's visionary steps towards solarisation, AAI further explored the possibility of ground mounted solar PV plants wherever vacant land is available. Accordingly the works of ground mounted solar projects of 19.8 MWp capacity awarded at 03 airports & installation is in progress.

PROJECT DETAILS

1. Solar Roof Top Power Projects Completed Under Capex/Resco Model

Total capacity of solar plants commissioned up to April-2016: 4.80 MWp at 13 airports.

2. Solar Roof Top Power Projects in Progress Under Capex Model

Roof top Solar Power plant works are in Progress at 14 Airports for a total capacity of 4.90 MWp.

3. Ground Mounted Solar Power Project Works In Progress (Capex/Resco) Model

The Ground Mounted Solar Power Plant works in progress under CAPEX/ RESCO Model at 03 airports.

4. Impact of Solar Power Projects at Airports


The implementation of these Solar Power Projects at AAI Airports shall not only help AAI in reducing its energy bill, it shall also substantially reduce the carbon footprint of civil aviation sector in the country. This Green Initiative also serves as a Corporate Social Responsibility of AAI.

AAI goes green

All new airports worldwide are aiming to get a green tag through energy efficient designs. Airports Authority of India is in sync with this concept and has implemented eco-friendly devices in its modular buildings throughout the country.

Some of the initiatives AAI has implemented for sustainable development are:

- Use of all electrical appliances conforming to Bureau of Energy Efficiency (BEE) with a 4- star rating and above.
- Occupancy sensors, timers, to shut off lights automatically.
- Automatic sliding doors and air curtains to reduce air-conditioning loss.
- Escalators with sensors to save energy.
- First PSU in India to establish a unique paper recycling unit and won Golden Peacock Eco Innovation Award.


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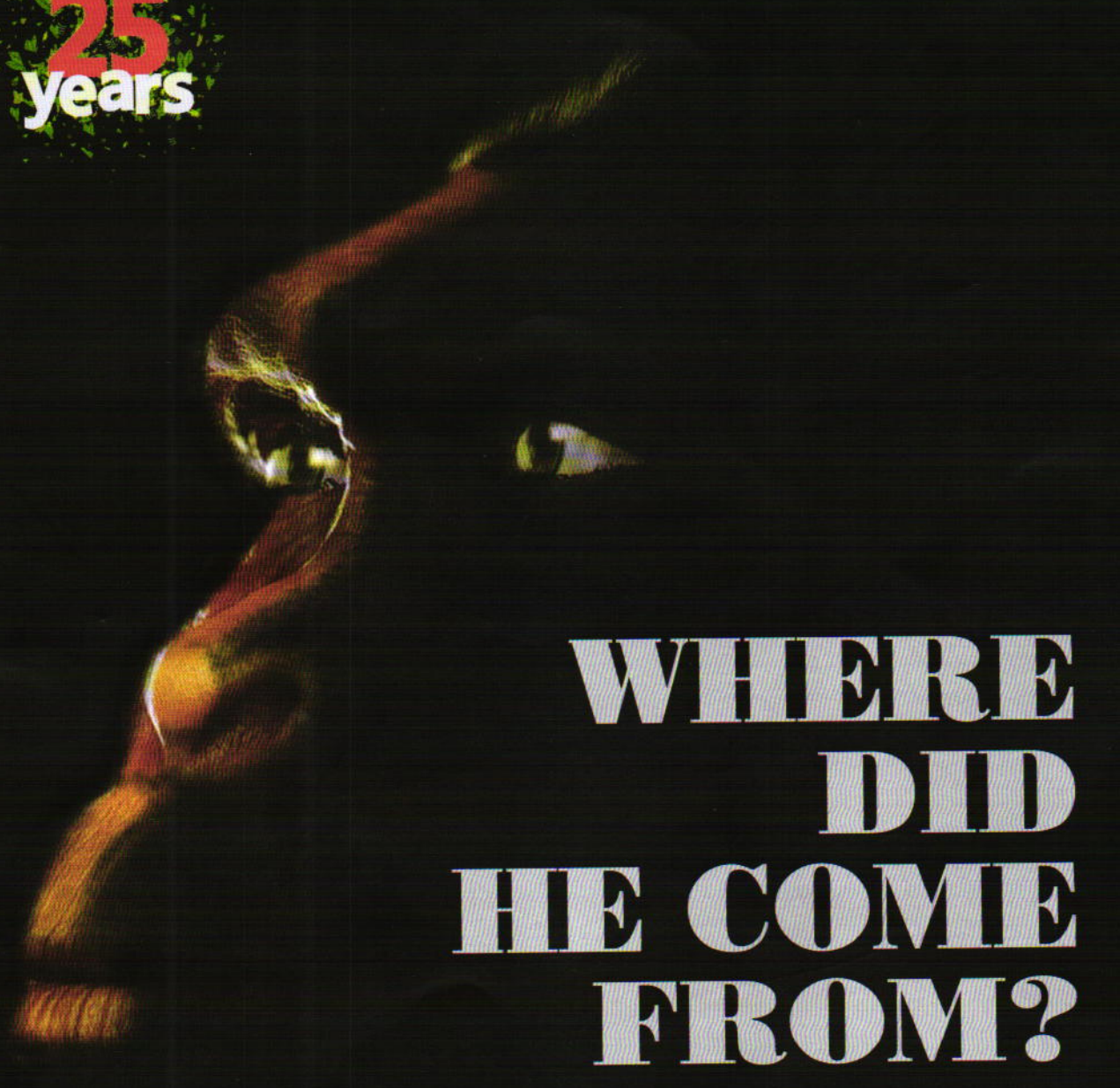
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