



CASE STUDY: INFOSYS TECHNOLOGIES LIMITED (BPO CENTER), JAIPUR



KEY PARAMETERS

Occupancy Type	Office Space
Built up area	295000 sq. ft
Completed	August 2010
Location	Jaipur, Rajasthan.
Green consultant	En3 Sustainability Solutions
Rating System	LEED India NC version 1.0
Rating Achieved	Platinum

LEED SCORES



The BPO center of Infosys Technologies Limited in Jaipur achieved LEED PLATINUM certification under LEED India NC version 1.0. Infosys Campus sports many green features that directly contribute to the environment in terms of reduced energy consumption, greenhouse gas emissions, impact on the local environment and usage of natural resources. En3 has been working closely with the Infosys team to make their new BPO campus in Jaipur a green building.



SITE SUSTAINABILITY FEATURES

- The project is located in close proximity to public transportation and campus buses for the staff have been provided for commute from the city to the campus thereby minimizing transportation pollution and strain on local infrastructure
- Provision of battery charging stations for **4%** of the total car parking capacity in an effort to promote use of alternative and low emitting vehicles and to reduce transportation pollution.
- Provision of carpooling spaces for **5%** of the total car parking capacity within the premises in an effort to promote share-rides to reduce transportation pollution as well as strain on the local infrastructure. An analysis of the amount of CO2 emissions saved by van pool shows a reduction of more 97 tonnes of CO2 per employee per year.
- Rain water harvesting tanks have been provided to harvest **533** cum per day of rain water and this is to ensure post-construction runoff is less than pre-construction runoff.
- 100% of roof area is covered with a highly reflective material to reduce heat islands and to minimize impact on microclimate and human and wildlife habitat.

WATER EFFICIENCY

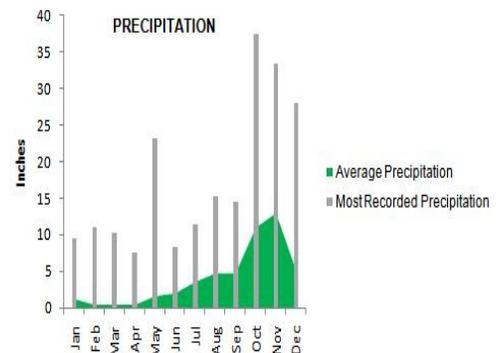
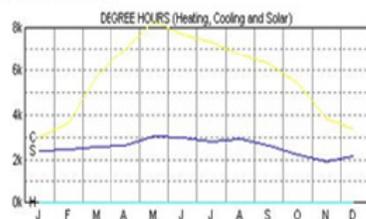
- Water is an integral part of “Infosys” Campus and every effort is been taken to minimize water use by installing water efficient fixtures. Low flow dual-flush toilets, sensor based urinals and other low flow fixtures have been selected to install at site to reduce water consumption by over **40 %**.
- Specialized selection of landscaping design and species to reduce overall landscaping water requirement by 100%.
- 100% of wastewater is being treated onsite to tertiary standards using Membrane bio reactor based technology.

ENERGISING THE BUILDING

- Energy efficiency measures such as Hi albedo paint on roof, high performance glazing, efficient lighting design, efficient HVAC design, VAV systems, AHU's with VFD and Heat recovery wheels for saving more energy than the conventional systems
- Selection of CFC free and HCFC free refrigerants thereby avoiding global warming and ozone depletion.
- 7.5% of the building energy load is met using photovoltaic arrays which is a source of onsite renewable energy
- Measures incorporated in the building that contribute to energy efficiency include reduced overall conductance of walls and roof, high performance glass with optimum shading coefficient and visual transmittance, overhangs and shading to reduce solar gains, efficient lighting, amply daylit spaces and energy recovery.

NAME: Chennai-Madras
 LOCATION: IND
 DESIGN SKY: not available
 ALTITUDE: 16.0m

LATITUDE: 13.0"
 LONGITUDE: 80.2"
 TIME ZONE: +5.5hrs



RESOURCE MANAGEMENT

- The project has ensured up to 88% of total construction waste of debris has been recycled or reused thereby diverting them from landfills.
- The project has achieved a combined recyclable content value of 13.13% of total material by cost thereby reducing virgin material exploitation.
- About 59% of the project's material and products by cost was extracted, harvested and recovered within 800 km of project site and 80% of the total material cost was manufactured locally/regionally thereby reducing the pollution associated with transportation.
- About 5.19% of the total materials by cost used in the project are from rapidly renewable sources.
- 100% of the wood and wood based materials used in the project are FSC certified.



INDOOR ENVIRONMENTAL QUALITY

- In order to support enhanced IAQ and long-term well-being of all occupants, 30% more than the minimum ventilation rates as per ASHRAE standards is provided.
- The entire building is a non-smoking building thereby ensuring the health and safety of all its occupants.
- Permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements.
- Low emitting paints, carpets and composite wood products have been used to enhance the indoor environment and provide superior workplace for all employees.
- After completion of all interior activities, the project has done proper building flush out in line with LEED requirement to enhance their staff working spaces.
- Provision of a thermally comfortable environment that supports productivity and well-being of all building occupants



NOVELTIES

- Infosys has engaged in a 2 year contract for green power equal to 100% of the energy requirements of the building
- Infosys has taken Initiatives to educate the staff, students, building occupants, visitors and the clients on the various sustainability measures that can be taken to create more environmental friendly energy efficient spaces.
- Housekeeping by biodegradable materials to address health, hygiene and well being of staff make them eco-friendly. The building has been designed by En3 to showcase various green and sustainability measures and practices to ensure great amount of awareness is created by the buildings to promote green awareness to all the visitors and occupants & spearhead the green movement in the state and the country.

En3 would be glad to answer any queries or questions you have on any green or sustainability related topics. Feel free to contact us at info@en3online.com and for more information about us and our work visit www.en3online.com