



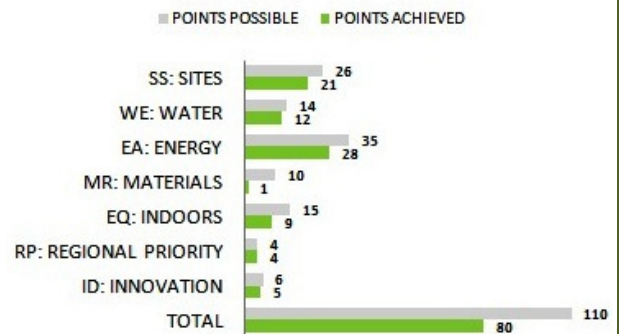
## CASE STUDY: ASCENDAS IT PARK ZENITH BUILDING, CHENNAI



### KEY PARAMETERS

<b>Occupancy Type</b>	Tech Park
<b>Built up area</b>	748000 Sq Ft
<b>Completed</b>	November 2014
<b>Location</b>	Chennai, Tamilnadu
<b>Green consultant</b>	En3 Sustainability Solutions
<b>Rating System</b>	LEED O&M (Existing Building)
<b>Rating Achieved</b>	<b>PLATINUM</b>

### LEED SCORES



Ascendas, Zenith is the 1st existing Multi tenanted building in Chennai to achieve Platinum rating under LEED EB:O&M V 2009 from the US Green Building Council and verified by the Green Building Certification Institute (GBCI). Ascendas, an environment friendly IT Park, is an engineering marvel, which not only saves energy and cooling costs but also gives more lung space and natural light for employees working there. En3 has done innovative work to help the IT Park get greener and achieve its LEED PLATINUM certification from the US Green Building Council under Existing Buildings Category.



### *SITE SUSTAINABILITY FEATURES*

- The project is in an ideal location with close proximity to public transportation thereby minimizing transportation pollution and strain on local infrastructure.
- An integrated Pest management, Erosion Control and Landscape Management plan has been implemented at site.
- The project has achieved a 82.37% reduction in conventional commuting trips through car-pooling and alternative commute transportation
- 30.69% of storm-water is mitigated for both an average weather year and for the two-year, 24-hour design storm
- 99.12% of the car parks are covered which will create more open spaces on the ground and also reduce the local heat island effect.
- Provision of high reflective albedo roofing for 85.95% of the roof surface thus reducing urban heat island effects.
- All exterior light fixtures, 50 watts and over are partially or fully shielded so that they do not directly emit to the night sky. All non-emergency built-in light fixtures with a direct line of sight to any openings in the building envelope are automatically controlled to turn off during after-hours period.

### *WATER EFFICIENCY*

- The project has permanently installed water meters that measure the total potable water use for the entire building, associated grounds and for irrigation and indoor plumbing fixtures and fittings sub-systems.
- The project has achieved a 48.09% reduction in potable water use through the use of efficient indoor plumbing fixtures from the LEED-EBOM Baseline.
- Efficient Landscaping is done resulting in 100% reduction in potable water usage.

### *ENERGISING THE BUILDING*

- In line with international standards, the project building contains no CFC-based refrigerants in base building systems. The refrigerants used in the air conditioning system are environmentally friendly and have very low ozone depleting and global warming potential.
- The building earned an ENERGY STAR score of 98 meaning its energy efficiency rates in the top two percent of all similar buildings nationwide.
- The project team has implemented a retro-commissioning plan for the major building energy-using systems and has conducted the investigation and analysis phase
- System-level metering is in place for at least 80% of the total expected annual energy consumption of the building, and that at least two of the three largest energy-use categories or building systems are metered to an extent representing at least 80% of total annual energy consumption for that category or system.

### *RESOURCE MANAGEMENT*

- The project has implemented an Environmentally Preferable Purchasing policy.
- The project team has performed an audit of the entire ongoing waste stream of the building and grounds during the performance period. The project has identified opportunities for improved waste diversion practices.



## *INDOOR ENVIRONMENTAL QUALITY*



- The project has in place a high-performance cleaning program that addresses staffing, training of maintenance personnel, the use of chemical concentrates, the use of sustainable cleaning materials, the use of sustainable hard floor and carpet care products, and the use of sustainable cleaning equipment.
- The project is mechanically ventilated and the outdoor air ventilation rates provided by each air handling unit serving occupied spaces in the project building exceed the minimum required by ASHRAE62.1-2007 by at least 30% under all normal rating conditions.
- The project maintained a sustainable purchasing program for cleaning materials and products, disposable janitorial paper products, and trash bags, and that 80% of the purchases during the performance period satisfied sustainability criteria. Low emitting adhesives, paints and carpets have been used to enhance the indoor environment and provide superior workplace for all employees.
- An audit in accordance with APPA Leadership in Educational Facilities Custodial Staffing Guidelines has been conducted and that the facility received a score of 1.66.
- The project building utilizes entryway systems to reduce the amount of dirt, dust, pollen and other particles entering the building.

## *NOVELTIES*

Green housekeeping program creates awareness amongst building occupants and promotes the green initiatives.

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](mailto:info@en3online.com) and for more information visit us at [www.en3online.com](http://www.en3online.com).