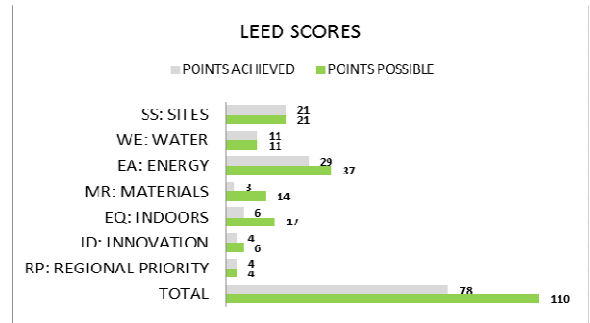




CASE STUDY: Optum Global Solutions

KEY PARAMETERS

Occupancy Type	Office Space
Built up area	59377 sq ft
Completed	May 2016
Location	Bangalore, Karnataka
Green consultant	En3 Sustainability Solutions
Rating System	LEED CI version 3.0
Rating Achieved	GOLD



The Optum Office is entirely compliant with LEED requirements and has been awarded LEED Gold under LEED ID+C rating system from USGBC.

SITE SUSTAINABILITY FEATURES

- The project has more than two bus lines or routes within a walkable distance of 0.25 miles from the project building entrance for its building occupants thereby minimizing transportation pollution and strain on local infrastructure, protects green-field site and preserve habitat and natural resources.
- Provision of Bicycle and Shower facility for their staff reduces pollution and land development impacts from automobile use.
- Carpooling spaces within the premises in an effort to promote and ride sharing to reduce transportation pollution as well as strain on the local infrastructure.
- The base building landscaping and irrigation systems have been designed to reduce potable water consumption for irrigation by 100% from a calculated baseline case and 53.72% in total water use
- More than 96% of the base building on-site parking is located underground or under cover. This will create more open spaces on the ground and also reduce the local heat island effect.
- The number of parking spaces provided to the LEED-CI project does not exceed the minimum number required by local zoning regulations and preferred parking for car/vanpools is provided for 5.28% of LEED-CI project FTE occupants.

WATER EFFICIENCY

- Water plays an integral part in the greening process of Intuit.
- The project has reduced potable water use by 48.42% from the calculated baseline design fixture performance requirements established by the Energy Policy Act of 2005 through the installation of low flow urinals, showers, kitchen faucets, flush water closets



ENERGISING THE BUILDING

- Provision of high reflective material on roof, high performance glazing, efficient HVAC design, AHU's with VFD and Heat recovery in the base building, has contributed to HVAC energy savings of about 34.21% over conventional building HVAC systems.
- Selection of CFC free and HCFC free refrigerants avoids global warming and ozone depletion.
- Light fixtures and efficient lighting design contribute to 52.33% of reduction in connected lighting power density over the base case of ASHRAE standards with the interior spaces achieving a lighting power density as low as 0.61 watts/square feet.
- Provision of day lighting sensors within 15 feet throughout the periphery of the building has been installed in all regularly occupied spaces. This controls the artificial lights.
- About 90.52% of the equipment and appliances such as Monitors, CPU, Projectors, Refrigerators, and Printers are ENERGYSTAR rated.
- Metering equipments have been installed for monitoring the energy use in the building such as EB and DG energy monitoring, individual meters for common area lighting, lifts, chillers, pumps, office area lighting, power and AHUs independently for each tenant, measuring chilled water consumption for each tenant using BTU meters for the ongoing accountability and optimization of building energy and water consumption performance over time.

RESOURCE MANAGEMENT

- The project has diverted more than 89.16% of the on-site generated construction waste from landfill.

INDOOR ENVIRONMENTAL QUALITY

- The entire building is a non-smoking building thereby ensuring the health and safety of all its occupants.
- The project reduces air quality problems resulting from construction to promote the comfort and well-being of construction workers and building occupants
- Low emitting adhesives, paints and composite wood products have been used to enhance the indoor environment and provide superior workplace for all employees.
- Provision of a thermally comfortable environment that supports productivity and well-being of all building occupants.

NOVELTIES

The office building achieves exemplary performance in optimize energy performance: Lighting Power. The project provides alternative-fuel fueling stations for 4.05% of the total parking capacity. Moreover the building has been designed to showcase various green and sustainability measures and practices and the effort is to use this building to create greater awareness on green concepts and sustainability to all its 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 visit us at www.en3online.com.