



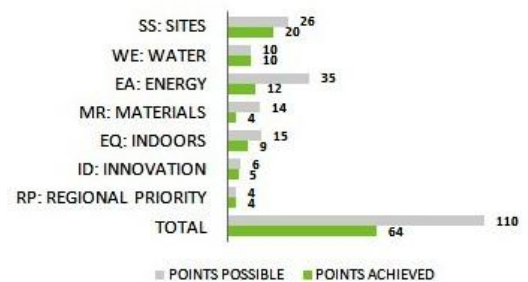
CASE STUDY: TELECOMMUNICATIONS REGULATORY AUTHORITY, DUBAI



KEY PARAMETERS

| | |
|-------------------------|------------------------------|
| Occupancy Type | Office |
| Built up area | 121936 Sq ft |
| Completed | January 2015 |
| Location | Dubai |
| Green consultant | En3 Sustainability Solutions |
| Rating System | LEED BD+C v3 |
| Rating Achieved | GOLD |

LEED SCORE



The office of TELECOMMUNICATIONS REGULATORY AUTHORITY, DUBAI achieved LEED GOLD certification under LEED BD+C (Building Design and Construction) version 3.0. TRA building sports many green features that directly contribute to the environment in terms of reduced energy consumption, impact on the local environment and usage of natural resources. En3 has been working closely with the TRA team to make their office a green building.



SITE SUSTAINABILITY FEATURES

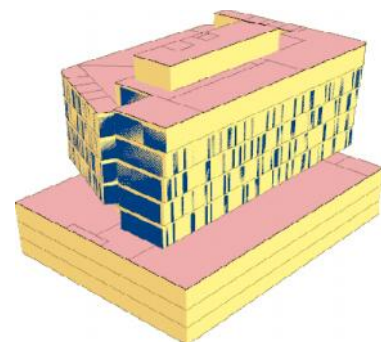
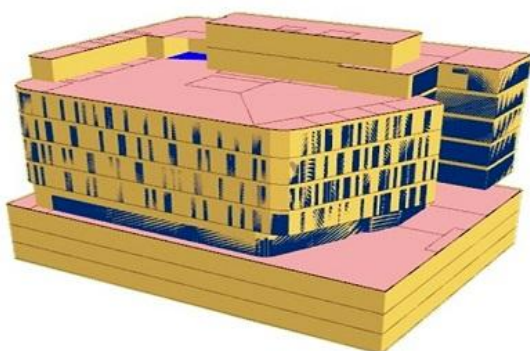
- The project is located in close proximity to public transportation thereby minimizing transportation pollution and strain on local infrastructure
- Provision of battery charging stations for 15% of the total car parking capacity in an effort to promote use of alternative and low emitting vehicles and to reduce transportation pollution.
- Bicycle storage facilities have been provided to serve 5.71% of the LEED-NC project FTE and transient occupants, measured at peak occupancy, and shower facilities have been provided for 2.45% of the LEED-NC project FTE occupants
- Project has provided alternative-fuel fueling stations for 3.76% of the total parking capacity.
- Provision of carpooling spaces for **14%** 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.
- 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.
- 93% of parking areas are located under cover.

WATER EFFICIENCY

- Water is an integral part of the 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 51%.
- 100% of wastewater is being treated onsite to tertiary standards and the treated water is being reused for landscaping and other purposes.
- The landscaping and irrigation systems have been designed to reduce potable water consumption for irrigation by 100% and total water used for irrigation by 57.14% from a calculated baseline case.

ENERGISING THE BUILDING

- The project has achieved 20.15% energy cost reduction in proposed design
- Energy efficiency measures such as Hi albedo paint on roof, efficient lighting design, efficient HVAC design for saving more energy than the conventional systems.
- Project has Selected CFC free and HCFC free refrigerants thereby avoiding global warming and ozone depletion.





RESOURCE MANAGEMENT

- The project has achieved a combined recyclable content value of 23.69% of total material by cost thereby reducing virgin material exploitation.
- About 31.84% of the project's material and products by cost was extracted, harvested, recovered and manufactured within 500 miles of project site thereby reducing the pollution associated with transportation.

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.
- 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.

NOVELTIES

- The project has achieved 51% reduction in potable water use
- The project has reduced potable water for sewage conveyance by 100%
- 31.84% of the building materials value includes materials and products that have been manufactured within 500 miles of the project site
- 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