



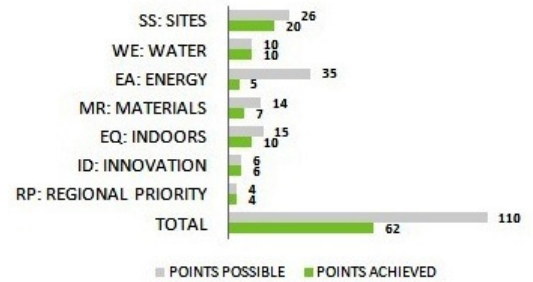
CASE STUDY: HYATT, Raipur



KEY PARAMETERS

| | |
|-------------------------|------------------------------|
| Occupancy Type | Hotel |
| Built up area | 1,07,806 Sq ft |
| Completed | June 2015 |
| Location | Raipur |
| Green consultant | En3 Sustainability Solutions |
| Rating System | LEED India NC 2011 |
| Rating Achieved | Gold |

IGBC SCORES



Chartered Hotels, Raipur achieved LEED GOLD certification under LEED India NC version 2.0. The Hotel 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 Chartered Hotels team to make their new hotel and resort at Raipur 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 **3.7%** of the total car parking capacity in an effort to promote use of alternative and low emitting vehicles and to reduce transportation pollution.
- The project has provided providing bicycle racks and shower & changing rooms for 8% and 0.5% of the peak building occupants
- Provision of carpooling spaces for **7.41%** 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.
- The net exposed roof area of the project is 3595.84 Sq m, of which 113.25 Sq m is vegetated and 2574.58 Sq m have high SRI finish. This reduces heat islands and minimizes impact on microclimate and human and wildlife habitat.

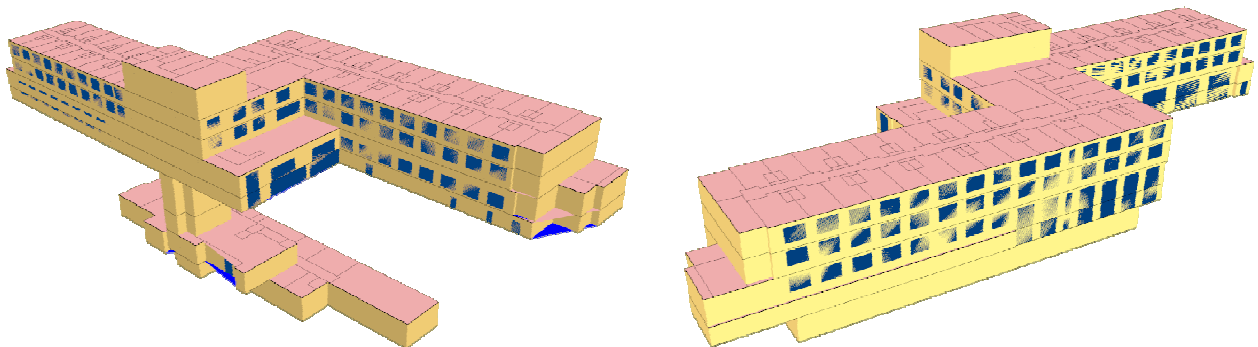


WATER EFFICIENCY

- Water is an integral part of Hotel 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 65 %.
- 100% of design case irrigation water requirements are met through treated gray water
- 100% of wastewater is being treated onsite to tertiary standards.

ENERGISING THE BUILDING

- Energy efficiency measures such as efficient roof, efficient glazing, reduced lighting power, and efficient HVAC system including Heat recovery for saving more energy than the conventional systems.
- The whole building design demonstrates an improvement of 10.6% in energy costs, as compared with the base building of ASHRAE 90.1-2007
- Selection of CFC free and HCFC free refrigerants thereby avoiding global warming and ozone depletion.



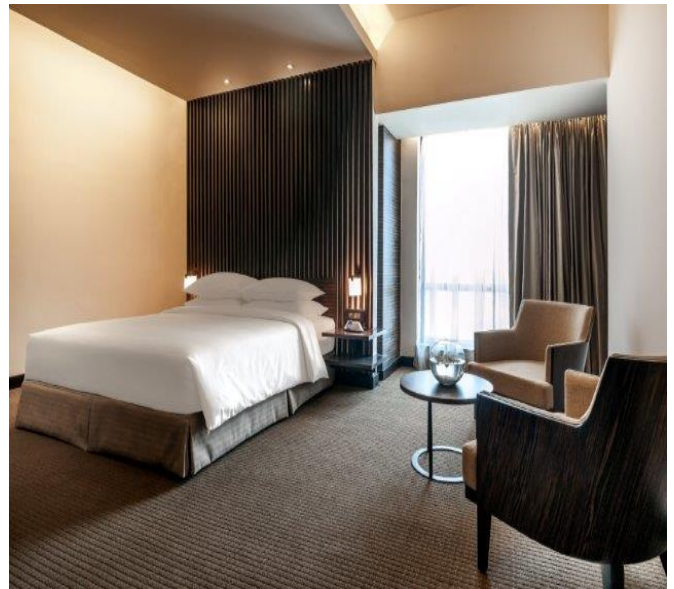


RESOURCE MANAGEMENT

- The project has ensured more than 95% 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 15.41% of total material by cost thereby reducing virgin material exploitation.
- 23% of the total value of materials used in the project is extracted, harvested or recovered, as well as manufactured, within 400 km of the project site.
- 5.62% of the total value of construction materials has rapidly renewable content.
- 73.95% of the wood based materials & products certified in accordance with FSC principles & criteria were used for the wood building components.

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.
- The project has developed a Construction IAQ Management plan and implemented the plan during construction and pre-occupancy phase.
- Low emitting paints, adhesives and sealants and carpets 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.
- Individual comfort controls for at least 52% of the building occupants are provided to enable adjustment to meet individual need and preferences.
- The project has achieved 2% daylight factor in 86.57% regularly occupied spaces.



NOVELTIES

- The project has implemented a Green Chemicals purchasing plan to ensure that 50% of cleaning chemicals will be sustainable green cleaning products to reduce environmental impact. 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