



# PWD REST HOUSE, Bhokardan Aurangabad Division

GRIHA EB



4 STAR



The following strategies were adopted by the project team to reduce the impact of the existing building on the environment:

#### Site Parameters:

- Trees were preserved on site in the ratio of 1 tree per 80 sqm.
- Preferred parking provided for electric vehicles.
- Strategies such as soft landscape area, hard paved area with SRI coating were implemented over 80.5% of site area to reduce the Urban Heat Island Effect.

#### Maintenance and Housekeeping:

- Centralized storage facility was provided at site level to collect the segregated waste on site.

#### Energy:

- Replacement of old electrical equipment and appliances with BEE star rated ones has reduced the annual energy consumption from 3,942 kWh/year to 783 kWh/year.
- Solar photovoltaic system of 3 kWp was proposed to generate 4,374 kWh of renewable energy.

#### Water Efficiency:

- Rain water harvesting system to cater to 100% of the roof water run-off was provided on site.

#### Human Health and Comfort:

- Indoor comfort conditions measured in summer months; Dry bulb temperature= 27 - 29°C, Relative humidity= 26% - 28%, Daylight levels= 152 - 195 lux, Artificial lighting levels= 102 - 191 lux and Indoor noise levels: 43 - 48 dB; were compliant with benchmarks of the Indian Model for Adaptive comfort, SP 41 and NBC 2005.

Location	: Bhokardan, Jalna District, Maharashtra
Site Area	: 10,180 sqm.
Built up Area	: 224 sqm.
Typology	: Hospitality
Rating Category	: GRIHA for Existing Buildings (EB)
Version	: 1
Date of Award	: 31 May, 2019
Client	: Government of Maharashtra
Integrated Design Team	: Public Works Department (PWD) Maharashtra
Green Building Consultant	: Built Environment (India) Pvt. Ltd

Total energy offset  
by renewables  
= 558.6%

Total reduction in  
Landscape water demand  
= 100%

#### TOTAL CARBON OFFSET BY THE PROJECT:

By planting native saplings & preserving existing trees: 4.11 ton/year

By conservation of conventional energy: 8.20 ton/year