



# NEW MAHARASHTRA SADAN New Delhi

GRIHA EB



3 STAR



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

#### Site Parameters:

- Amenities such as bus stop, ATM/bank, restaurant, grocery store and gym within 500 meters walking distance from the main entrance of the project were available.
- Preferred parking was provided for electric vehicles.
- Strategy such as paving of hard paved areas with SRI >50% was implemented over 13,955 sqm. (59.7%) of site area to reduce the Urban Heat Island Effect.

#### Energy:

- Replacement of old electrical equipment and appliances with BEE star rated have been implemented in the project.
- Solar photovoltaic system of 150 kWp is installed to generate 2,28,926 kWh of renewable energy.

#### Water Efficiency:

- Building water consumption reduced from 37,138.75 kl/year to 19,618.75 kl/year (i.e., 47.14%)

#### Human Health and Comfort:

- Indoor comfort conditions measured in summer months;
  - Dry bulb temperature= 27 °C - 30°C, Relative humidity= 52% - 55%, Daylight levels= 289- 344 lux, Artificial lighting levels= 256- 367 lux and Indoor noise levels: 36 – 39 dB; were compliant with benchmarks of the Indian Model for Adaptive comfort, SP41 and NBC 2005.

Location	: New Delhi
Site Area	: 23,361.5 sqm.
Built up Area	: 16,309.5 sqm.
Typology	: Commercial
Rating Category	: GRIHA for Existing Buildings (EB)
Version	: V1
Date of Award	: 11 June 2019
Client	: Public Works Department (PWD) Maharashtra
Integrated Design Team	: Public Works Department (PWD) Maharashtra

Total energy offset  
by renewables  
= **10.5%**

Total reduction in  
building water demand  
= **47.2 %**

#### TOTAL CARBON OFFSET BY THE PROJECT:

**By planting native saplings & preserving existing trees: 1.28 ton/year**

**By conservation of conventional energy: 158.95 ton/year**