



Environmental Management & Policy Research Institute (EMPRI) Annex Building

Location	: Bengaluru, Karnataka
Site Area	: 1623.30 sqm
Built up area	: 1199.71 sqm
Typology	: Commercial/Office
SVA GRIHA rating	: 4 star

The following strategies were adopted to reduce the building impact on the natural environment:



Landscape

- 21 new native trees have been planted on site, 6 existing mature trees have been preserved on site.
- Over 71% of the hard paved area is shaded with trees and asbestos sheet.



Energy

- Over 85% of total living area falls under daylight zone.
- The LPD of the project is 3.29 W/sqm which is lower than the ECBC specified LPD limit of 10.80 W/sqm for offices.
- The thermal efficiency of the building envelope is 125 W/sq.m.
- 2.5 kWp solar photovoltaic panels have been installed on the roof top of the building.
- All fans installed in the office are BEE 5 star rated. As the building is naturally ventilated, no air conditioners have been installed.



Water and waste

- The project has reduced building water demand by 55% below the SVAGRIHA base case through the use of low-flow fixtures.
- Rainwater storage tank of 18,277 litre capacity has been installed on site to capture and utilize rainwater.



Materials

- Use of low-VOC and lead free paints has been used to maintain good indoor air quality.
- The project has demonstrated a reduction in embodied energy by 29.55% by using Compressed Soil Earth Blocks (CSEB) for external and internal walling application.



Lifestyle

- All basic amenities like park, grocery store, convenience store, pharmacy etc. are in close proximity to the site.
- There is a provision of dedicated rest room and toilet for the service staff within the site.
- The project takes several environmental awareness initiatives and fosters the same through panels, brochures, magazines, newsletters etc. to create awareness on environmental issues and concerns in Karnataka.
- Organic housekeeping products are used for activities like cleaning floors, toilets, and other associated operations in the project.
- Waste generated from the building (Dry waste, wet waste, paper waste, electronic waste) is properly segregated on site.

Integrated Design Team

Client	: Environmental Management & Policy Research Institute
Project Management	: Karnataka Rural Infrastructure Development Limited
Green building consultant	: Centre for Research on Sustainable Building Science (TERI-Southern Regional Centre)