



Indian Institute of Technology (IIT)-Gandhinagar, Phase 1A

Location	: Gandhinagar, Gujarat
Site Area	: 211795 m ²
Built up Area	: 127534 m ²
Renewable Energy installation	: Proposed 500 kwp capacity of installation
GRIHA LD master plan rating	: 5 Stars
Year of completion	: 2017

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

📍 Sustainable Site Planning:

- Hard paving has been reduced and landscape is interspersed between the building clusters to reduce the increase in outdoor ambient air temperature.
- Storm water management is planned to reduce peak run-off quantity.
- Sustainable Urban Drainage system in the form of holding ponds has been implemented on the site.

📍 Water management:

- The project shall reduce its annual water demand by 41.86% through reuse of treated waste water.
- All fixtures in the project will be low-flow fixtures.
- 100% waste water is treated by DEWATS system installed on site.

📍 Energy Optimization:

- The buildings are designed to be about 46% more energy efficient than GRIHA LD base case.
- Street lighting is designed to be about 85% more energy efficient than the GRIHA LD base case.
- Street lights shall be designed to meet minimum lighting requirements and shall be installed with automatic switches.

📍 Solid waste management:

- Bio-gas plant has been installed on site to treat all the organic waste generated and convert it into electricity.
- The project shall convert all its organic kitchen waste into manure.
- All waste from campus will be segregated and sent for recycling through authorized recyclers.

📍 Sustainable transport:

- Site planning has been done to improve walkability in the campus through continuous and universally accessible footpaths.
- E-rickshaws will be provided on site for intra-site movement.
- Electric charging facilities will be provided for more than 10% of the total car and two wheeler parking slots.

📍 Social sustainability:

- All construction workers will have clean drinking water, toilets and accommodation.
- Campus has been designed to ensure universal accessibility.
- The institute shall implement measures to increase environmental awareness in the campus.

Integrated Design Team:

Client	: Indian Institute of Technology (IIT)-Gandhinagar
Principal Architect for Academic Block	: Mitimitra Consultants
Principal Architect for Hostel Block	: HCP Design Planning & Management Pvt. Ltd.
Principal Architect for Housing Block	: Vastu Shilpa Consultants
MEP Consultant	: Jhaveri Associates
Green Building Design and Certification	: dbHMS