



Indian Institute of Technology, Gandhinagar

GRIHA LD Masterplan Rating (Version 2)	: 5 stars
Location	: Gandhinagar, near village Palaj, Gujarat
Site Area	: 162.7 hectares / 16,26,838 m ²
Built up Area	: 5,51,965 m ²
Energy Reduction	: 37% below GRIHA LD base case
Water Reduction	: 30% below GRIHA LD base case
Organic Waste Reduction	: 100%
Renewable Energy Installation Proposed	: 500 kWp

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

Sustainable Site Planning

- Hard paving reduced and landscape interspersed between the building clusters to reduce increase in outdoor ambient air temperature
- Storm water management planned to reduce peak run-off quantity.
- Sustainable Urban Drainage systems to be implemented in the form of holding ponds.
- Over 79% of total area under existing tree clusters, lakes and ravines will be preserved.

Energy Efficiency

- The buildings are designed to be about 36% more energy efficient than GRIHA LD base case.
- Street lighting is designed to be almost 48% more energy efficient than the GRIHA LD base case.
- Street lights to be designed to meet minimum lighting requirements and installed with automatic switches.

Water Efficiency

- A project plans to reduce its annual water demand by 30% through reuse of treated wastewater and captured rainwater.
- All fixtures in the project will be low-flow fixtures.
- DEWATS system will be installed for treating waste water to be reused in the campus.

Solid Waste Management

- The project is attempting to convert all its organic kitchen waste into biogas.
- All waste from campus will be segregated and sent for recycling through authorized recyclers.

Efficient Transport

- Site planning done to improve walkability of 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

- All construction workers to have proper safety gear and equipment.
- All construction workers to have clean drinking water, toilets and accommodation.
- Campus will be made universally accessible
- IIT plans to implement measures to increase environment awareness in the campus.

Integrated Design Team

Client	: IIT Gandhinagar
Principal Masterplanner	: Dr. Vinod Gupta
Green Building Design and Certification	: dbHMS