

# AMITY UNIVERSITY HARYANA GREEN AUDIT REPORT

10th Jan 2018

Document No: GAR018001

Registrar
Amily University Haryana
Manesat, Gurgaon-122413

By: Ashish Jain I ashish.jain@aeonconsultants.in

# AMITY UNIVERSITY HARYANA **GREEN FEATURES**

# 1. SUSTAINABLE TRANSPORTATION:

With onsite hostel and housing facilities and providing Campus bus facilities, Amity University Harvana achieves significant reduction in commuter trips and thereby environmental pollution caused by vehicles and overall carbon footprint. The project has achieved significant reduction in conventional commuting trips.

# 2. PRESERVATION & RESTORATION OF NATURAL HABITAT:

Amity University Haryana has maintained an optimum balance between environmental and functional requirements. Plantation and greening initiative are regularly followed to include plants of this region (native varieties) along with fruit bearing trees. These activities critically improve environmental performance of Amity University Haryana campus, which has been transformed into a green oasis in harsh semi-arid Aravalli region. It takes special care for environment and preserves most of the trees present at the site including a grand old Banyan Tree, which is slowly transforming into functional space amidst nature. Almost half of the site is provided with vegetation and trees with native and adapted species reducing water demand and maintenance. In very short span of time, campus has been turned into an ecologically sound campus, which is reflected in the large varieties of birds and butterfly found in the campus . Periodical survey of AUH campus has revealed more than 120 species of birds and more than 40 varieties of butterfly which has been documented and is indicative of very sound ecological space.

# 3. HEAT ISLAND REDUCTION:

Hardscape areas available on-site are provided with light-colored reflective surfaces, shaded with trees and grass pavers contributing to reduced heat island impact. The provision of large sunken space between building complex also moderate heat regime.

#### 4. WATER CONSERVATION:

Amity University Haryana has onsite Sewage Treatment Plant (STP) and Effluent Treatment Plant (ETP) to treat entire wastewater generated from domestic consumption and toilet towards becoming a ZERO Discharge site. Treated water in flushing and gardening and low flow toilet fixtures, reduced potable water demand. By using STP treated water for irrigation, potable water Reviewall usage for irrigation purposes has been reduced by 100%.

# 5. RAINWATER HARVESTING

Anie University Haryana Rainwater harvesting and stormwater management provisions (reservoir and structures) are part of building design. 100% rainwater runoff from building terraces and ground surfaces is recharged to ground aquifer. Rainwater harvesting pits connected through a large stormwater network laid

Page 1

throughout the campus. The rainwater harvesting pits are effectively maintained in order to maintain the quantity and quality of rainwater being discharged to ground aquifer.

#### 6. ENERGY CONSERVATION:

Amity University Haryana is dedicated to make a sustainable green campus by adopting green building energy conservation measures in design along with rooftop solar PV system. The academic buildings have incorporated below energy conservation measures in design:

- · Double wall for exterior walls
- Optimized WWR (window to wall Ratio)
- · High efficiency chillers for air-conditioning
- High efficiency pumps & motors
- · Efficient lighting fixtures
- Minimal use of artificial lights during non-operating hours
- Use of Energy Star rated equipment

The project has a robust system of monitoring its energy consumption that leads to efficient operation and maintenance of energy systems and equipment.

# 7. WASTE MANAGEMENT:

Amity University Haryana puts all its efforts and initiates towards a clean and healthy surroundings within and outside the campus. Within Amity University Haryana, sustainable waste management plan has been implemented incorporating following strategies:

- a. Compost Pits for Organic Waste (Landscape and Food Waste)
- b. Biogas plant for generating gas out of biomass generated from Dairy Farm
- c. Centralized Waste Segregation and Collection areas
- d. Provision of separate waste bins for Recyclable and Non-recyclable waste types
- e. Professional agency for waste segregation, collection and diversion from landfill.

With above strategies, minimal waste is diverted to landfill either by reuse of materials or by safe disposal.

In order to enable neighborhood community to also practice waste management for hygienic and healthy conditions in the vicinity, Amity has constructed various waste collection sheds outside the campus. These waste sheds are effectively utilized helping to create clean and healthy surroundings.

# 8. COMMUNITY/ SOCIAL INITIATIVES

In addition to the construction of waste collection sheds in site vicinity, Amity University Faculties, Students and Administration teams have been regularly organizing medical camps and educational camps for neighborhood community. Some of the additional initiatives under progress include:

- Tree plantation drive of native vegetation in campus on regular basis to promote green cover.
- · Gifting tree sapling to dignitaries as souvenirs.
- Declaration of Amity University Haryana as 'No-Polythene Zone'
- Animals and birds have been preserved; Annual 'Campus Bird Count' and similar campus based activities be organized.
- Apart from structured initiatives several academic activities including teaching learning and research infrastructure have also been developed over last few years.
- LEED Lab, an education module, is established as teaching learning exercise for students based upon green building designs and certificates

# 9. AMBIENT AIR QUALITY:

Infrastructure for Air Quality and weather monitoring station, has been established, in collaboration with national and international agencies. SAFAR Air Quality Monitoring station, Air Pollution Decision Theatre have been installed in collaboration with Indian Institute of Tropical Meteorology (IITM), Pune and Indian Institute of Technology, Delhi respectively. AUH is also under the network of field station of NASA for optical depth monitoring of several atmospheric parameters including Ozone. Project is dedicated in making sustainable green campus by adopting green building IAQ Measures like:

- Efficient Exterior Cleaning and Maintenance practices
- Blend of Landscaped areas, fully grown trees act like a filter for cleaning the outside air
- Outdoor Pollutants like PM2.5, PM10 are below the maximum allowable limits.

# 10. Green Building Certification

Amity University Haryana has demonstrated high performance in meeting the green building rating compliances and has achieved highest PLATINUM level of rating under LEED Existing Buildings: Operations And Maintenance rating system by United States Green Building Council.

Registrar Amity University Haryana Manesar, Gurgaon-122413