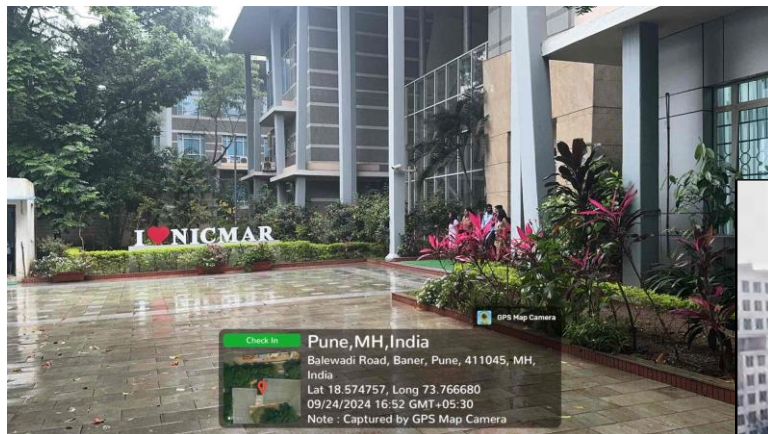


# RECEIC Awards on Resource Efficiency & Circular Economy

Circular Technology Disruptors - Academia/Research Institutions

**WINNER - NICMAR University, Pune**

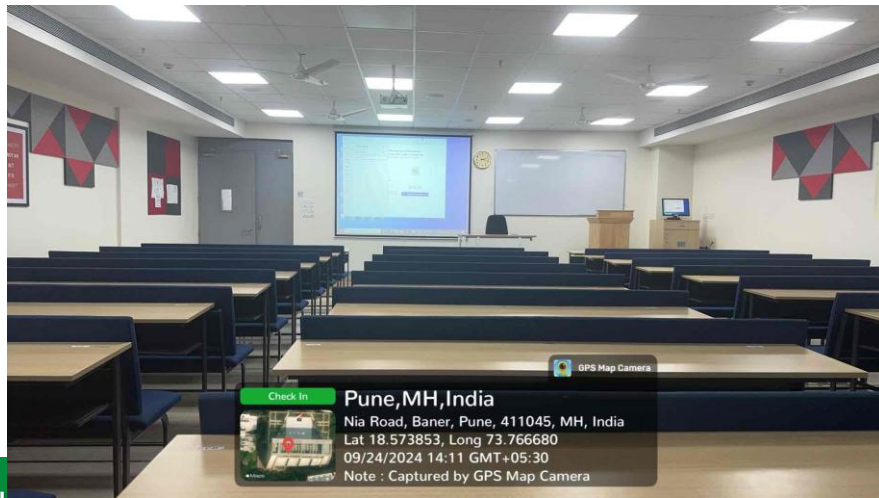


Where....



# Green Initiatives within the campus

- **41%** Annual infrastructural equipment load cater with the Solar Pv.
- Energy Efficient lighting fixtures like use of LED with more than **40%** LPD reduction compared to the base case LPD as per ASHRAE 90.1.2010
- High performance air-conditioning systems catering to **72.4%** of total area with a efficiency rating of 50% over the base standard
- Water efficient plumbing fixtures with water savings of **36.40%** over baseline
- 100% waste management, 100% waste water reuse, 100% high solar reflectance index on non-roof coverage, **38.27%** green cover





## Solar PV Plant on Phase V Building

**Installed Plant Capacity :**

**97kW**

**Total Electricity Generation from Solar Plant :**

**Annual :**

**1,45,500 kWh**

**Life-Time (25 years):**

**36,37,500 kWh**

**Cost Savings**

**2.5 Lakh/annum**

**Anticipated CO<sub>2</sub> emissions mitigated over 25 years**

**2983 tonnes**

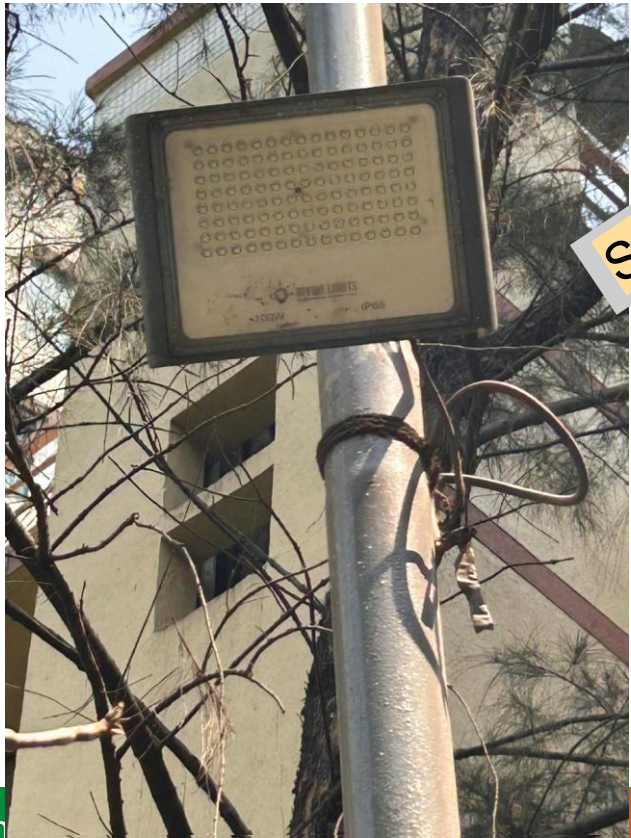
**This installation will be equivalent to planting**

**4772 Teak trees over the life**

**Payback period = 3 years**

**time (Data from IISc)**

**Monitored and controlled system using AI**



Solar Street Lights with Daylight Sensors

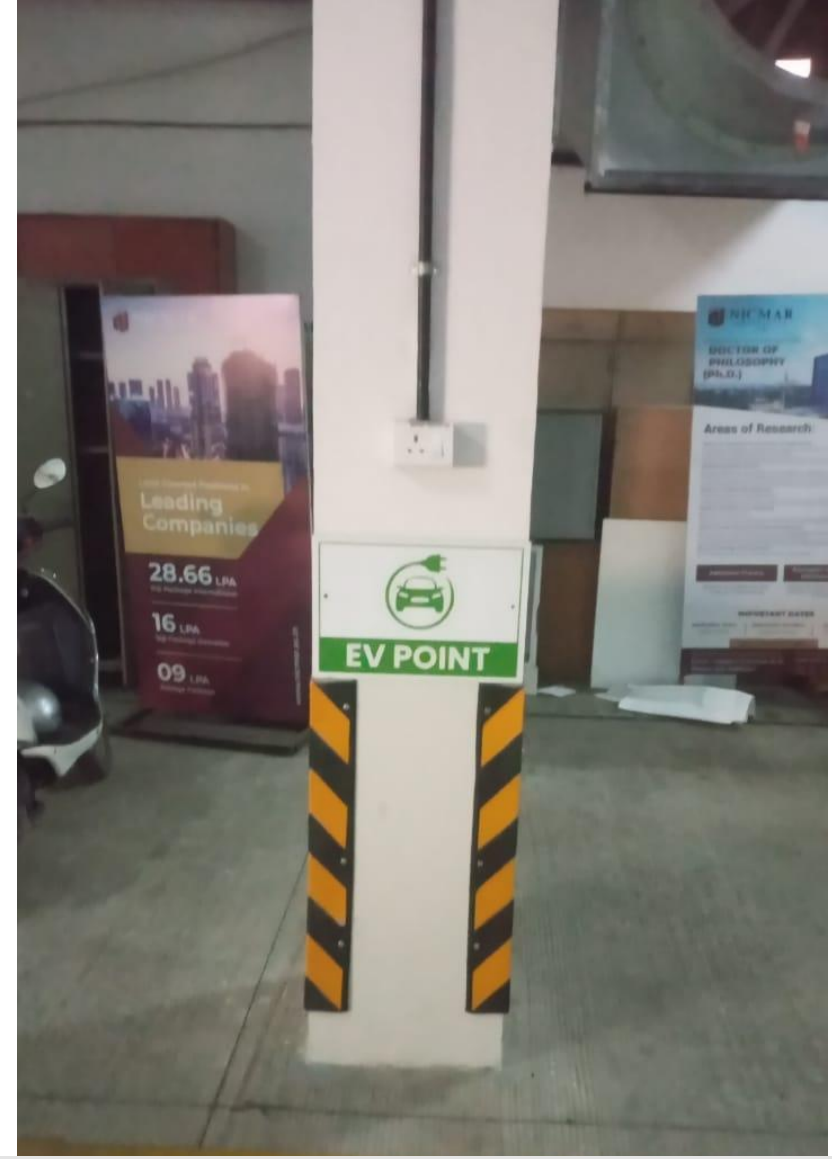
Exterior lighting LPD has reduced by 71.42% . 50% efficient as per ASHRAE 90.1-2010



pole no 2 from gate no 2 towards ultima hostel



opp ultima hostel

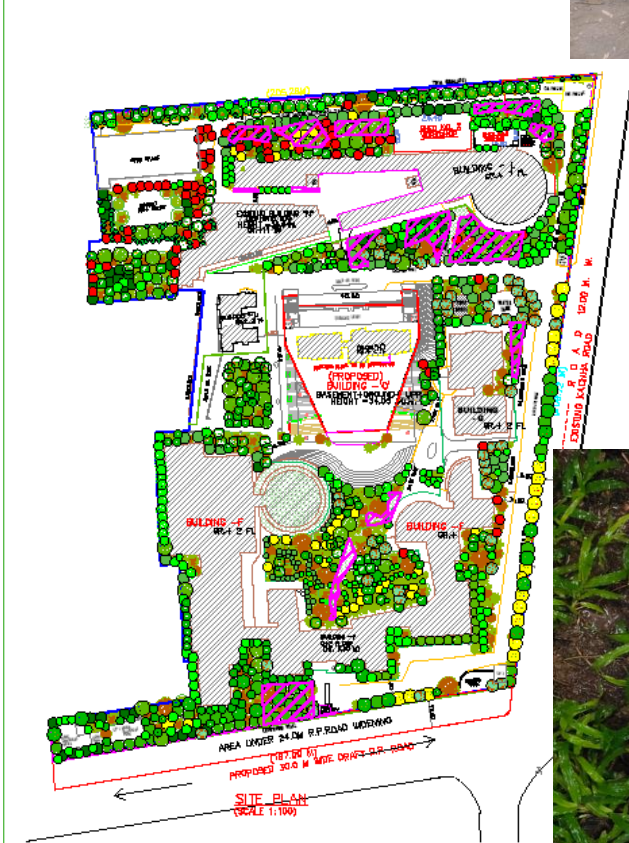


No external light fixture emits more than 5 % of fixture lumens at an angle of 90 degrees or higher from nadir

# Waste & wastewater reuse



# Organic waste



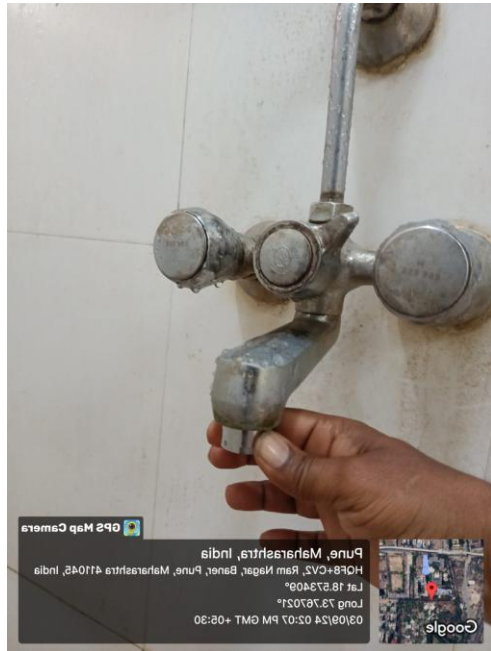
| DROUGHT TOLARANT |                | EXISTING TREES ON SITE |                  |
|------------------|----------------|------------------------|------------------|
| NEW PLANTATION   |                | DROUGHT TOLARANT       | NORMAL S         |
|                  | EUCALYPTUS 33  |                        | THYRSUS 40       |
|                  | ASHOKA 80      |                        | ASHOKA 40        |
|                  | KARVEERA 04    |                        | KARVEERA 30      |
|                  | GULMOHAR 32    |                        | GULMOHAR 30      |
|                  | COCONUT 10     |                        | COCONUT TREE 05  |
|                  | PEEPAL 22      |                        | PEEPAL 40        |
|                  | NARANO 33      |                        | NARANO 40        |
|                  | JAMBUN 82      |                        | MAHOGANY 72      |
|                  | TAMARIND 30    |                        | DARATA 38        |
|                  | BANYAN TREE 37 |                        | KARNEL 30        |
|                  | BANYAN TREE 12 |                        | SNAKE PLANT 15   |
|                  | BANYAN TREE 96 |                        | BANYAN WELL 20   |
|                  |                |                        | BANYAN WELL 34   |
|                  |                |                        | BANYAN WELL 73   |
|                  |                |                        | BANYAN WELL 59   |
|                  |                |                        | BANYAN WELL 30   |
|                  |                |                        | BANYAN WELL 87   |
|                  |                |                        | BANYAN WELL 80   |
|                  |                |                        | BANYAN WELL 69   |
|                  |                |                        | BANYAN WELL 40   |
|                  |                |                        | BANYAN WELL 34   |
|                  |                |                        | BANYAN WELL 30   |
|                  |                |                        | BANYAN WELL 80   |
|                  |                |                        | BANYAN WELL 70   |
|                  |                |                        | BANYAN WELL 16   |
|                  |                |                        | BANYAN WELL 1402 |



# Green spaces

# Drip Irrigation

# Water conservation, reuse, recycle



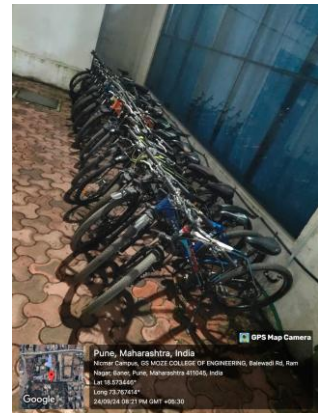
# Percolation test & recharge pits



# Water meters, Valves, Low flow fixtures



# Sustainable transportation



20.30% Reduction in Annual Water Consumption

# Rain water Harvesting pits

# Way Forward – To become Net-Zero by 2030!



# THANK YOU