

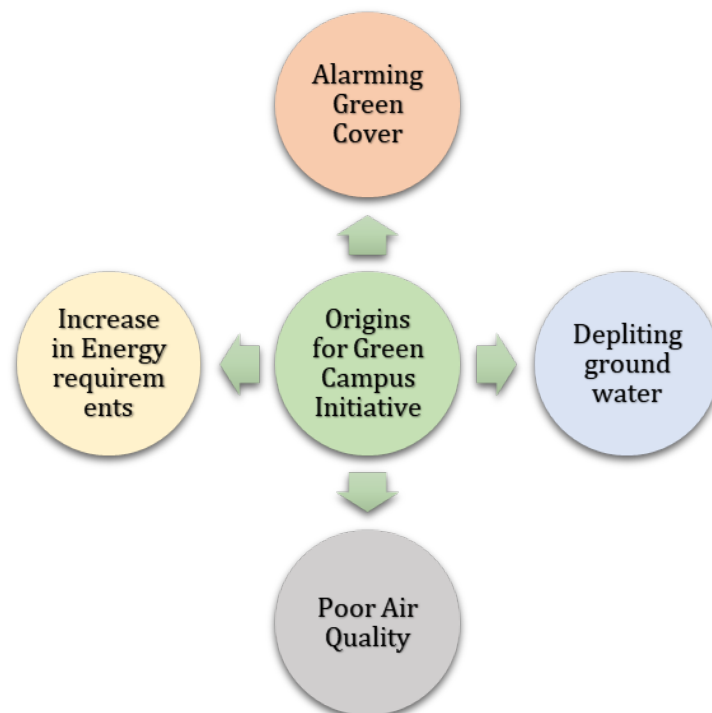
## Best practice- 1

**Title of Practice: Pioneering environmental sustainability in education through green campus**

### Objective:

- Inculcate sense of environmental responsibility amongst students
- Contribute towards Ahmedabad city's Green Cover.
- Implement strategy towards conservation of water and energy.
- Prepare platform for carbon neutral campus.

### Context:



- In year 2012 Ahmedabad Municipal Corporation (AMC) conducted its green cover survey in which they found out that city has only 4.66% green cover with only 6.18 lakh trees. Source: [https://ahmedabadcity.gov.in/portal/jsp/Static\\_pages/garden\\_dept.jsp](https://ahmedabadcity.gov.in/portal/jsp/Static_pages/garden_dept.jsp)
- In survey done to assess depleting ground water levels; status Ahmedabad was changed from 'Over- exploited' to 'Critical' in 2013 by Central Ground Water Board. Source: [https://phedwater.rajasthan.gov.in/content/dam/doitassets/water/Ground Water/Pdf/Reports/assessment\\_reports/Dynamic GWRE-2013.pdf](https://phedwater.rajasthan.gov.in/content/dam/doitassets/water/Ground Water/Pdf/Reports/assessment_reports/Dynamic GWRE-2013.pdf)
- In 2016, Government of Gujarat and Government of India recognized increasing energy requirements per household in Gujarat state. Source: [http://powermin.gov.in/sites/default/files/uploads/joint\\_initiative\\_of\\_govt\\_of\\_india\\_and\\_Gujarat.pdf](http://powermin.gov.in/sites/default/files/uploads/joint_initiative_of_govt_of_india_and_Gujarat.pdf)
- WHO identified Ahmedabad as amongst the five most polluted cities in India in 2014. Source: [https://cdn.who.int/media/docs/default-source/air-quality-database/aqd-2014/aap\\_pm\\_database\\_may2014.xls?sfvrsn=9ba31698\\_3](https://cdn.who.int/media/docs/default-source/air-quality-database/aqd-2014/aap_pm_database_may2014.xls?sfvrsn=9ba31698_3)

### Practice itself:



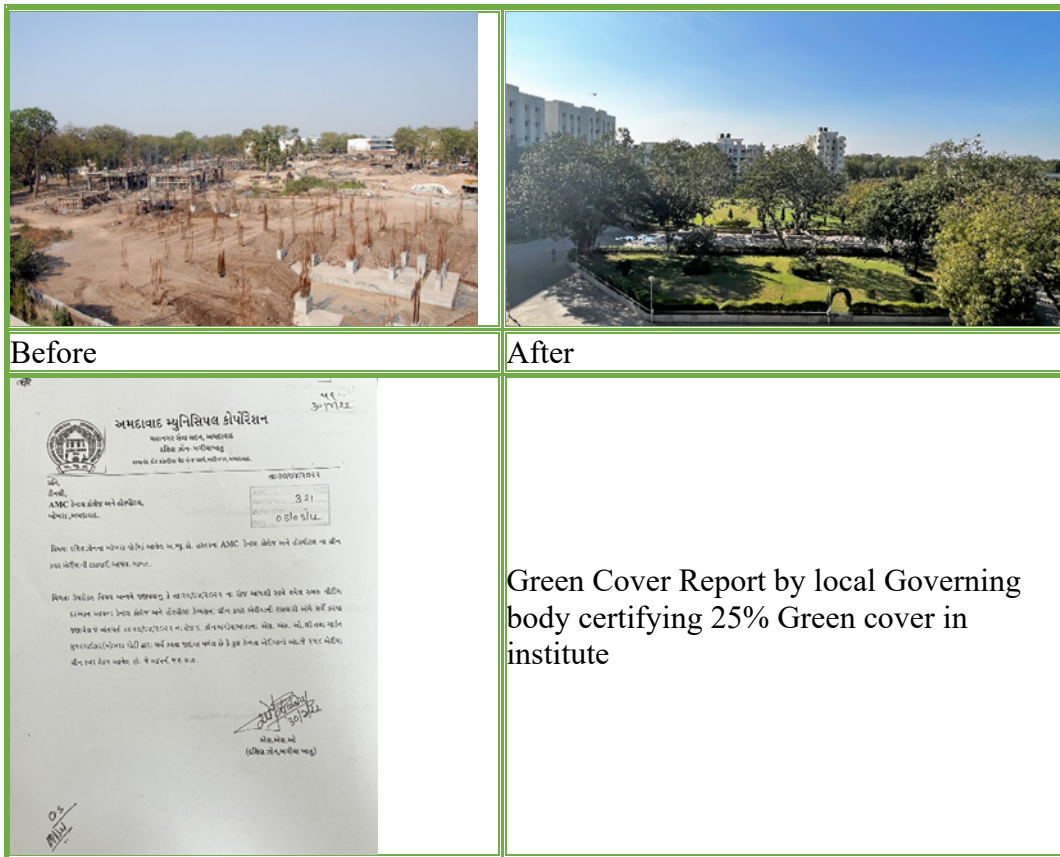
In year 2013 institute identified need to devise and implement strategies to increase green cover and reduce its carbon foot prints

- Yearly **phase wise and systematic tree plantation drive** since 2013.
  - Initiation of **‘Plant a Batch Tree’** since 2016- 2017 batch.
  - Celebration of **world environment day on 5th June every year since 2017.**
    - Concept of creating local **‘Oxygen Parks’.**
    - **Miyawaki forestation.**
  - **2018 onwards**, institute organises its **flower show for students and faculty** by brings floral bushes from AMC’s garden department.
  - Cultivation of **lush green gardens.**
- **Improving underground water levels**
  - In year **2014**, **Creation of 5 borewell recharging percolating wells.**
  - In year **2023**, **Installation of rain water harvesting system.**
- **Energy conservation strategies.**
  - Phase wise **switching from CFL lights to LED based technology** from 2020.
  - **Constant reminder** to all teaching and non-teaching staff about **shutting down all lights and fans while exiting room.**
  - Installation of **Sensor based energy conservation systems.**
    - **Installation of water sensors** for underground and overhead water tanks.
    - **Installation of Key-Tag sensors** in hostel rooms.
      - Lights turn off immediately after removal key card from socket.
- Alternative energy source: **Installation of Solar plant.**
- ‘MyByk’ tie up: **Bicycles for campus usage.**

**Dust free campus:** covering of open spaces with paver blocks.

**Evidence of success:**


- Plantation of **2483 trees since 2013** in phase wise manner (**25% green cover**).



- **Memory tree planted by 7 batches** on their graduation day.
- **7 ‘World Environment Day’** celebrated till now.



- 3 well lush green gardens with 1 Jogging track, 2 Oxygen Parks and 1 green courtyard.

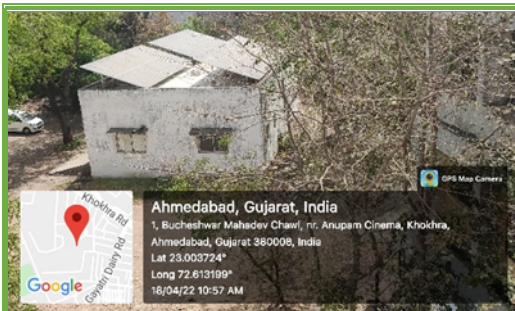
	Garden 1
	Garden 2
	Garden 3
	Garden with Jogging track
	Oxygen Park





Green Courtyard

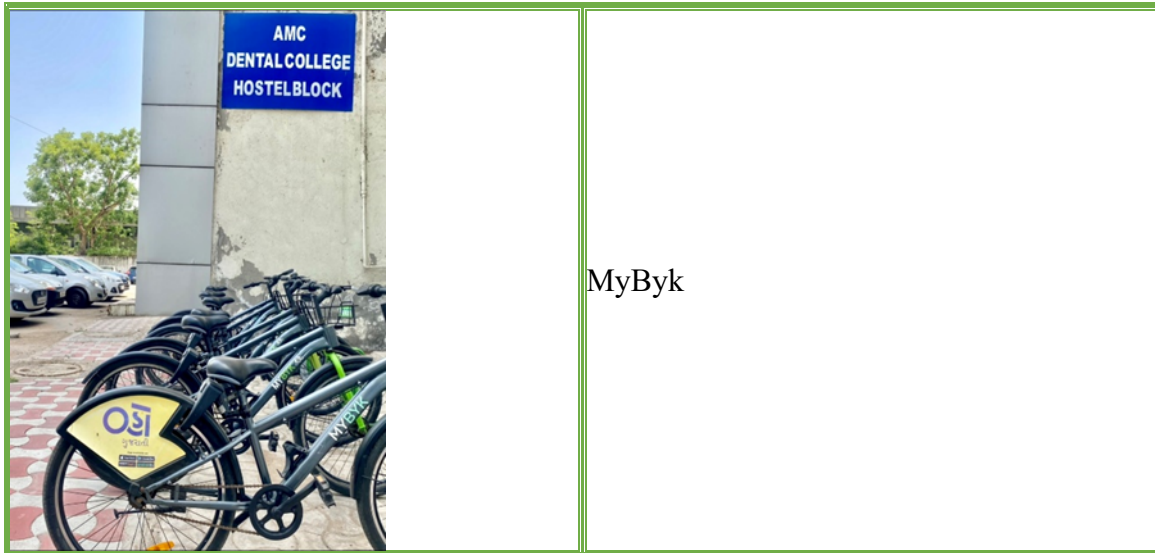
- **Improving underground water levels**
  - 5 borewell recharging percolating wells
  - 3 underground water tanks
  - Rain Water Harvesting system.
- **100% LED based light technology from 0% in 2020.**
- **17.5 kW operational solar plant.**
- **All hostel rooms are now equipped with Key-Tags.**
- **'MyByk' collaboration:** Students use bicycle for campus usage



Operational Solar plant



Hostel rooms with Key-tags



### Problems encountered:

- Institute is in **urban industrial and construction area**. Hence, **AQI in region is in severe condition** due to ambient air pollution and dust.
- Eventually **campus will be shared with IITRAM**. Institute is **compensating this space loss with Miyawaki forestation**.