

SIR P T SCIENCE COLLEGE, MODASA
Affiliated to
Hemchandracharya North Gujarat University,
Patan



7.1.3 Institutional Environment and Energy Initiatives

ACTION TAKEN REPORT AND ACHIEVEMENT REPORT

CRITERION 7

INSTITUTIONAL VALUES AND BEST PRACTICES

SIR P T SCIENCE COLLEGE, MODASA

Sir P T Science College Modasa is ever conscious about being a good steward of the environment along with pursuing its higher educational goals. A Green living habit helps in making the planet more sustainable and more livable, making it fit to live in. The institution tries to engrave the green movement into its regular pattern. Hence, the institution has included Green, Energy and Environment Audit in its policy documents ensuring its focus on applying it in the course of action.

With a motive to ensure green movement, the institution conducts a green and energy audit once in every two years internally. The department of Botany is in charge of the internal audit in which the faculty and the students form the committee who take active strides in strictly analyzing the green practices of the institution. The report along with the recommendations and proposals for corrections and further improvements are submitted by the auditing committee to the Head of the Institution which is communicated to the staff and students and displayed in the college website.

The institution also conducted Four Internal external audits in the periods 2020-21 and 2021-22 and Three external audits for the periods 2023-25 in collaboration with The personnel from the external agency visited and stayed in the campus to study the campus ecosystem and to analyze the practices of the institution in terms its utilization of energy and water resources and its green practices. The detailed reports submitted by the external agency were studied by the institutional authorities and corrective measures are taken and appropriate interventions are done to improve the sustainable practices of the institution.

ACTION TAKEN REPORT

2018-2024

Green, Energy and Environment Audits are conducted by in the academic year 2018-2024. As per the report of the auditing agency, the following actions are taken:

- Entered into an MoU with a Govt. recognized agency, E Coli for the proper disposal and management of non-biodegradable wastes. Bio Medical wastes
- CFLs are replaced by LED lamps
- Strict instructions are given to faculty, staff and students to unplug and turn off electrical appliances when not in use or after use
- Regular check-up on the gadgets are done to improve their efficiency
- Periodic water quality assessment is done regularly
- Measures are taken to re-strengthen the existing water management practices
- Measures are taken to sanitise water coolers
- Wastes produced in each department are quantified and data is prepared for the effective waste management in the campus
- Waste management committee spearheaded by the Principal is formed for the proper monitoring of waste management activities in the campus
- Measures are taken to gain an MoU with a recognized agency GEMI or the proper disposal and management of waste of Aravalli District.
- Measures are taken to effectively implement green protocol in the campus
- Maintenance of Incinerators are done as per the recommendations in the waste audit

ACTION TAKEN REPORT

2018-2023

Green, Energy and Environment Audits are conducted by Green Mentors in the academic year 2022-2025. As per the report of the auditing agency, the following actions are taken:

- Entered into an MoU with a Govt. recognised agency, E Coli for the proper disposal and management of non-biodegradable wastes.
- Strict instructions are given to faculty, staff and students to unplug and turn off electrical appliances when not in use or after use.
- Solar sensitive lamps are installed in the campus.
- Sensor based lamps are installed in the vantage points
- Regular check-up on the gadgets are done to improve their efficiency.
- Periodic water quality assessment is done regularly.
- Measures are taken to re-strengthen the existing water management practices.
- Wastes produced in each department are quantified and data is prepared for the effective waste management in the campus.
- Students and staff are given strict instructions to follow Green protocol.
- Waste management committee is assigned for the proper monitoring of waste management activities in the campus.
- Initiatives are taken effectively to configure e-waste management. E-waste collection drives and disposal as per the norms in the MoU are undertaken periodically
- A new incinerator has been installed to meet the increasing needs of waste management
- Maintenance of Incinerators and biogas plants are done as per the recommendations in the waste audit.
- Maintenance of the Butterfly garden has been upgraded and students are assigned to check on it regularly.

ACHIEVEMENT REPORT

Major Achievements as a result of Sensitization Programmes:

- ❖ **Environment Consciousness** awakened among staff and students
- ❖ **Green projects and eco-friendly initiatives** are undertaken by students with enthusiasm
- ❖ **Green protocol** is strictly maintained
- ❖ **Wheeling to the grid** is launched to utilize alternate energy sources resourcefully
- ❖ **Solar Panel is upgraded to 8 KW** capacity from 3 KW
- ❖ **Programme Conducted with GEDA**
- ❖ **Aravalli District Bio- Medical Waste Management successfully conducted by Students**

Major Practices based on Environment, Energy and Waste Audit:

Energy Conservation

- ❖ Purchased energy-saving appliances to conserve energy in the science departments
- ❖ Annual check-ups on the gadgets are done to improve their efficiency.
- ❖ CFL lamps and filament lamps are replaced with LED bulbs through KSEB's energy saving program.
- ❖ Awareness is given to staff and students to unplug and turn off electrical appliances when not in use or after use.

Water Audit

- ❖ Water coolers installed in all departments
- ❖ Periodic water quality assessment is done as part of the internal and external audit
- ❖ For re-strengthening the existing water management practices, awareness programmes are given periodically and also posters displayed for the same in the campus.
- ❖ High quality pipes for collecting waste water from the labs are installed
- ❖ Chlorination of main water sources is done regularly

Waste Audit

- ❖ Health Check up and Health Awareness class organized for support staff
- ❖ Periodic appraisal of different kinds of waste and its quantified data are collected for the effective waste management in the campus.
- ❖ A waste management committee is established comprising the Principal, Vice Principal, Manger, two faculty coordinators and two student representatives
- ❖ Construction and Demolition wastes are handed over to merchants for reuse of the materials and for proper disposal.
- ❖ Organic manure produced from the biogas and vermicompost are used for farming and horticulture in the hostel premises.

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- ❖ Sanitary napkin incinerators are installed in the campus. Ash remaining at the bottom of the combustion chambers of incinerators are properly disposed
- ❖ Management is paying much attention to the effective implementation of green protocols in the campus.
- ❖ Color-coded waste bins are kept for the waste segregation
- ❖ Electronic wastes and hazardous wastes are handed over to authorized e waste collection centers that are approved by Gujarat State Pollution Board
- ❖ In order to popularize Waste Management themes, days and years of importance are celebrated and various campaigns are undertaken by departments, cells and clubs of the college.

Biodiversity Audit

- ❖ Since the location of the campus has proximity to the River Majum, soil-binding native trees and shrubs are planted in the river banks and are maintained well to prevent soil erosion.
- ❖ Various native trees are planted inside the campus. Periodic monitoring and removal of alien and invasive species enhances restoration of native and wetland species.
- ❖ Regeneration of the endemic and native species is done wherever it is possible.
- ❖ Garden wastes out of trimming are put in the biogas plant.
- ❖ Excess seedlings which come after the distribution to students in the campus are planted in the public places like Anandpura Kampa Palace.
- ❖ Botanical garden is well maintained. College also initiated a checklist for the Medicinal plant of the campus.
- ❖ Various competitions are organized for the students to familiarize with the flora and fauna of the campus. Periodical update on the campus bird count are done by the Biology department

Constitution of a campus green policy


- ★ The green policy is revitalized and strengthened by giving stress to emission reduction and the adoption of green substitutes.

Promotion of Carbon Neutral (Green) Events

- ★ The College constituted a green fund from the savings made from sustainable initiatives and further used the amount for more green initiatives in the campus.
- ★ Eco-boxes or caskets are kept in the campus to collect suggestions and other green innovative ideas for the campus to embrace sustainability.

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Principal
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