



KALINDI COLLEGE

UNIVERSITY OF DELHI

Policy on Environment and Energy

PREAMBLE

Kalindi College is a NAAC accredited 'A' grade college with a core mission to achieve academic excellence and achievements focusing girl's education. Our motto literally means "*The real ornaments are Knowledge, Modesty and Sense of duty*". We are conscious of our fundamental duties as envisaged in the constitution of India and we try to incorporate best practices at institutional levels to minimize the impact on environment and ensure resilience and sustainability. We are committed to fulfil the legitimate requirements of our present generation without compromising the ability of future generations to meet their own needs in line with sustainable development goals (SDGs). The college strives to reconcile institutional activities with environmental conservation for a safe and secure future in the era of climate change.

CONTEXT

Kalindi College is committed to practice and maintain high environmental standards in all of its activities, including teaching, research, and community involvement. The college is more ecologically conscious and has earned a reputation as a responsible institution. The biodiversity with a lush green vegetation and fauna with an equally maintained herbal and plant gardens is a testament to our credentials for maintaining high environmental standards.

PURPOSE

The Environmental and Energy Policies of the college is made to provide an overview of the College's vision to minimize the environmental impacts of its activities and operation and sustainable management of the available resources. The policy statement highlights how the college would pursue environmental best practises and inspire the sustainable use of resources at the community level within and outside college premise. It lays out the concepts, delineate priority areas, and methods for the college's environmental plans' implementation, management, and evaluation. Its goal is to reduce energy and raw materials consumption that could jeopardize the sustainability measures being taken at college level. This policy will communicate the College administration's goals and objectives to College employees, students, and staffs, as well as aid in the creation of a better environment for future generations.

SCOPE

The policy document will aid in the integration of efficiency and environmental consciousness into daily activities, allowing us to better understand our duties and dedication to natural resource conservation and utilisation. Our college has tried to address the issue of sustainability as a part of curricular and extra-curricular activities. We welcome suggestions and promote exchange of ideas to make a more risk-averse, resilient and a sustainable society. We sincerely hope that Kalindi College will take the lead in developing new frameworks for understanding the paradigm of sustainable development. We're excited to learn about new approaches that could help put the sustainability drive into action. The College will continue to be an attractive institution for study, research, sponsorship, and collaboration with the government as a result of the legislation and execution of this innovative policy, which will serve as a model for other institutions.

PRINCIPLES AND OBJECTIVES

Kalindi College is passionate about the environment and has implemented various sustainable environmental initiatives in its campus. Various committees have been constituted to carry out and oversee these tasks. On the academic front we have an independent department i.e. Department of Environmental Sciences for teaching the compulsory course of environmental sciences at graduate level. Apart from that, our college have also duly constituted important committee to assess, manage and implement the college policing in line with sustainable practices for example we have an active Eco-club, garden committee, Plant incubation centre, solid waste management committee, and other clubs/committees actively working at institutional level. We also on an annual basis undertake a mandatory "Green audit" as mentioned in the criteria-7 of NAAC. Following are the initiatives that have been taken at the institution levels for promoting awareness among students of all the disciplines about the problems of climate change through academic as well as non-academic outreach activities. We involve different stake-holders of our college in our activities for a broader outreach.

Kalindi shall pursue following objectives:

1. Use the semester long course-curriculum to promote education for the multidisciplinary nature of environment and sustainable development.
2. The College will attempt to train its personnel and develop knowledge of environmental issues and the environmental effects of its activities among academic staff, students, and other users.
3. The college's respective committees will formally monitor the work done on sustainability projects/initiatives, measure their progress, and report on their accomplishments.
4. The university will continue to comply with environmental legislation in order to reduce its environmental effect by pursuing a number of goals, including plantation, water management, energy conservation, solid waste management, air quality management, and carbon footprint reduction.

5. Develop and maintain an ISO: 14001 environmental management systems as well as an ISO: 50001 energy management system.
6. Actively collaborate with local groups in the areas of environment, energy efficiency, and sustainable development by engaging in communication with government agencies, municipal corporations, and affiliating colleges.
7. Promote environmental assessment initiatives.
8. Raise awareness about keeping the campus clean and green.
9. Establish sustainable practises on campus and among stakeholders.
10. Ensure the long-term viability and environmental protection of the organisation.
11. Take initiatives that are friendly (clean fuel, renewable resources etc.)
12. Reduction in resource consumption
13. Financial savings via reducing resource use
14. Practical experience which enriches the curriculum
15. Improving/updating the institution's profile
16. Instilling in young people an environmental ethic and value system
17. Conduct audits to identify areas for improvement and make recommendations.
18. Teach sustainable development to students from all disciplines.
19. Promote sustainable development research and knowledge dissemination,
20. Green campuses and support local sustainability efforts, and
21. Engage and share information with worldwide networks
22. Implement carbon-neutral policies.
23. Increased environmental promotional events on campus to raise awareness.
24. Establishment of an environment/green committee to oversee eco-friendly projects on campus and in the surrounding area.
25. Introduce innovative technologies to make efficient use of energy resources.
26. Use of renewable energy sources.
27. Optimize your energy usage and costs.
28. Reduce, Reuse, and Recycle are the three R's.
29. Conduct internal energy audits on a regular basis to find energy-saving options.
30. The Institution Energy Audit/Management Cell manages regular monitoring and follow-up procedures to ensure effective implementation at department levels.
31. To make the Institute a role model in the area of energy conservation, train teachers, non-teaching staff, students, and housekeeping staff.
32. Encourage your faculty members to become Certified Energy Auditors and Managers.
33. Establish relationships with businesses and conduct a comprehensive energy audit.
34. Encourage people from all walks of life to be aware of the importance of energy conservation.
35. Review the Policy at least once a year.

The college's environmental policy will be pursued through the following priority areas:

1. WATER MANAGEMENT

- Use effective management strategies to conserve water and reduce its use.
- Use of least amount of water possible in accordance with its activities, and it will ensure that the water it uses is both provided and disposed of in the purest possible condition.
- A continuous water conservation programme would be implemented to track use, prevent leakage, and remove excessive or unnecessary use.
- Installing rainwater harvesting systems in all campus buildings for ground water replenishment and water self-sufficiency.
- It will also support artificial recharge and the resurrection of traditional groundwater recharge processes.
- Encourage reporting leaks and swiftly repairing them.
- Employing a caretaker to take quick action to stop any water leaking from taps, pipelines, tanks, and toilet flushes, among other things.
- The institution shall promote efficient water use techniques, such as sprinkler or drip irrigation, in its gardening activities.
- Conserve water by building more Indian-style toilets rather than western-style toilets.
- Grease trap mechanism prevents the release and mixing of oil from the college canteen liquid waste in the municipal drainage system.
- The Biochemical Oxygen Demand in the effluent waste water produced by the college canteen is thus lowered.
- In washrooms, waste water created by a reverse osmosis (RO) system is reused.

2. SOLID WASTE MANAGEMENT:

The college will strive to limit waste creation in all possible ways, including reducing the procurement of new materials, reusing and recycling existing materials, and, if this is not possible, disposing of garbage in a manner that has the least environmental impact.

- The usage of plastic is prohibited on campus.
- Waste containers/Dustbins are positioned where they are needed.
- Composting of solid waste from canteens, guest houses, and hostels.
- Hazardous and E-waste must be handled, transported, and disposed of properly.

- Hazardous chemicals and toxic hygienic compounds will be used as little as possible at the college.
- As the final stage in solid waste reduction and a way to turn waste into a resource, the college has committed to a comprehensive recycling programme.
- It will separate, recycle, and utilize its solid wastes, as well as build a waste-to-composting and bio-mass resource recovery programme.
- Engage in the 3Rs of environmental friendliness in a systematic way (Reduce, Reuse and Recycle).
- Collect and recycle paper waste generated on campus in collaboration with scrap merchants.
- Develop a technology-centric educational and administrative strategy to reduce solid waste.
- Supporting the digitization of attendance and internal assessment records reduces the consumption of paper.
- Update the college library's e books and e journals collection to reduce the need for printed books.
- Encourage students and teachers to utilize email to submit assignments.
- Take steps to raise student knowledge about food waste and strategies for reducing it.
- Minimizing the usage of packaged foods, as well as the habit of reusing and recycling non-biodegradable items
- Organizing solid waste management workshops for students.

3. E-WASTE MANAGEMENT

The college assures that its technological use and e-waste output have no negative influence on the environment. The college intends to work toward the following goals:

- More arrangements for the disposal of institutional e-waste.
- Working with e-waste recycling firms to recycle electronic waste.
- Awareness among students about e-waste reduction and environmentally responsible e-waste disposal techniques.
- Encouraging e-waste management initiatives at the departmental and societal levels.

4. AIR QUALITY MANAGEMENT:

- Maintain good green cover to enhance CO₂ sequestration from campus.
- On campus, there is a National Ambient Air Quality Monitoring Station (NAMP) of the Central Pollution Control Board, which helps to improve CO₂ sequestration.
- No vehicle day in a month to be initiated.
- To reduce dust, open places with lawn and grasses should be used.
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Clean Air Initiatives: Our students and employees are encouraged to take public transportation. We promote carpooling to college as a way to reduce pollution while also increasing social engagement. Automobile access is restricted on campus in order to discourage the usage of personal vehicles.

Smoking Free Campus: The College prohibits smoking and the use of other tobacco products in accordance with the framework given by the National Tobacco Control Programme (NTCP) 2007-2008. The college's anti-smoking committee guarantees that the anti-smoking policy is followed.

Transport: The College will take steps to reduce the negative consequences of its traffic on the environment. All faculty, staff, and students will be encouraged to walk, ride bicycles, or take public transportation to and from the college, as well as between its campuses and outdoors the campus, and will be discouraged from using single occupancy private vehicles.

5. REDUCE CARBON FOOTPRINTS:

Encourage the implementation of many carbon-reduction measures.

- Energy-efficient green building designs that monitor temperature and outside light.
- Implementing the Reduce, Reuse, and Recycle (RRR) approach to achieve zero waste.
- Green computing to cut down on paper usage.
- On-campus “No Vehicle Day” and the use of electric vehicles.
- Use of energy-efficient lighting and equipment.
- An increase in the amount of greenery on campus.

6. ACQUISITION OF SUSTAINABLE RESOURCES

The institution understands that one of the most important ways it can demonstrate its commitment to environmental stewardship is by making resource purchase decisions. The college will seek to get the most bangs for its buck by balancing immediate and long-term costs, maintenance, life cycle, and environmental costs when acquiring goods and services.

The college's purchasing policy should be strong, requiring the college to seek items and services that cause the least environmental impact in their manufacturing, distribution,

packaging, usage, re-use, recycling, and disposal. Avoiding the use of any potentially dangerous substances and encouraging suppliers to commit to improving environmental performance.

7. ENVIRONMENT MANAGEMENT SYSTEM

The college must establish an environmental management system (EMS), such as ISO 14000, and adopt standardised environmental management practises, document their actual use, and get credible third-party verification. The college should promote EMS adoption by prioritising ISO 14000 goods and services in procurement, with the exception of items reserved for the small-scale sector at any given time.

8. ENVIRONMENTAL AUDIT

The institution is committed to meeting the needs of environmental audits and will make every effort to provide training that will benefit both staff and students.

The college will be on the lookout for opportunities to collaborate with auditing organisations and will be informed of future developments in worldwide contexts.

9. ENVIRONMENTAL EDUCATION, TRAINING AND AWARENESS

Outreach and education are very important so that all members of the campus community understand the policy's goals and can help in its execution. This is why college supports and encourages awareness campaigns, seminars, workshops, conferences, and other interactive sessions to ensure that the Green Campus, Energy, and Environment policies are implemented effectively.

Environment-centric Student Societies and Department Activities

College encourages all departments, as well as specific student societies such as Green society, NSS, NCC, and others, to hold events, competitions, and training sessions that will result in beneficial environmental changes at the grassroots level. The institution works with departments and student clubs to help students become active environmental protectors and conservationists.

Green Society

Institutional shifts toward sustainability and environmentally friendly behavior have percolated down to students, leading to an increase in Green Society membership. Making the society mandatory will give it a larger platform to communicate the institution's environmental principles and raise awareness. Because obligatory societies need a certain number of hours of effort and dedication, the green initiatives and practices that are part of this strategy will be able to expand rapidly.

Conduct Green Audit

The institution intends to undertake a Green Audit of our college campus on a regular basis to analyze our strengths and weaknesses in order to advance our long-term sustainability goals. A green audit can help you figure out how and where you're wasting the most energy, water, or resources. The college can then think about how to make improvements and save money. It

can tell you what kind of garbage you have and how much of it you have. Waste minimization initiatives or recycling projects can be implemented. It will promote environmental principles and ethics while also raising health awareness. It helps students comprehend the implications of environmentally friendly behaviors on campus. Green auditing will help you save money by reducing your resource usage. It is critical that the college assess its own contributions to a long-term future.

Plastic-Free Campus

Since its founding, College has complied with the majority of its responsibilities in terms of solid waste management. In light of the Indian government's decision to ban all single-use plastics due to the harmful effects of plastic use and pollution, the college administration rigorously prohibits the use of single-use plastics in its property in order to make it a "Plastic Free Campus."

Clean Campus Initiatives

In accordance with the objective of the Swachh Bharat Abhiyan, College vowed to aggressively coordinate cleanliness operations both on and off campus. It pledges to keep this programme going. The following is the broad vision:

- Educating students and staff members about the importance of cleanliness and hygiene by staging frequent cleanliness drives. The goal is to encourage them to be proactive in their contributions.
- All community work done by the college's NSS, NCC, and Green Society volunteers will include activities under the Swachh Bharat Abhiyan.
- Staff members will be encouraged to participate in the college's cleaning drive.
- Competitions for posters and slogans, essay writing, spoken word poetry, speeches, and skits on the theme of "Swachh Bharat" will be held.
- To raise public awareness, rallies on topics related to the Swachh Bharat Abhiyan will be held on and around the college campus.
- Remove any waste materials, such as damaged furniture and obsolete equipment.
- Annually administer the promise by students and staff to keep the college campus and its environs clean.
- Hold workshops on the 3 Rs: trash reduction, reuse, and recycling.
- Make a commitment to manage garbage and keep the campus clean, especially during college events.

Landscaping Initiatives

The environment of a college's campus, like its buildings, can be considered as a tangible manifestation of its values. It is an important aspect of a campus's life, giving opportunities for study, recreation, outdoor activities, relaxation, and aesthetic enjoyment. Green campus

landscapes also assist recharge groundwater, control runoff, and purify and cool the air on campus. The landscape is a visual symbol of the school community's dedication to environmental stewardship. Landscape programmes are a fantastic approach to raise environmental awareness because campus landscapes are so visible and accessible.

In campus, there are more than 25 plant species as well as many acres of grass. The landscape of trees and plants provides clean, cool ambience to the visitors, students and staff, as well as a relaxing atmosphere.

College's extensive green cover also supports a diverse range of animals and uncommon birds, in addition to a well-maintained butterfly park within the campus. By organizing regular tree plantation drives and encouraging student groups to host tree planting events, the college pledges to enriching this healthy ecosystem and maintaining the institution's symbiotic relationship with nature.

10. ENVIRONMENTAL AWARDS

Institutions will be given awards for initiatives in rural development, environmental development, and sustainable development, among other things. An annual award for a well-known environmentalist, with at least one category for environmental protection, sustainable development, and so on. Clean and green campus awards will be presented to colleges on an annual basis. Encourage and support environmental, rural development, and sustainable solutions-related technologies and enterprises. Promote and initiate various prizes among and among institutions for strengthening environmental management and sustainable development awareness and implementation.

The college will focus on the following priority areas when pursuing the energy policy:

The Kalindi's energy policy expresses the institution's commitment to energy conservation by defining an energy management protocol for the institution's thermal and electrical energy systems, focusing on sustainable practices in reducing carbon footprint and other environmental impacts in accordance with Energy Conservation and Management standards, in order to maintain an eco-friendly green campus.

11. ENERGY CONSERVATION:

- Wherever possible, reduce the amount of electricity consumed.
- Energy-efficient light bulbs are gradually being replaced.
- Use of renewable energy to power the grid.
- Hostels and guest houses can use solar water heating systems.
- Participating in a "No Vehicle Day" on campus.
- Energy conservation by encouraging the use of natural light.

Renewable Sources of Energy

College is committed to reducing and managing its electricity consumption in a sustainable manner. The college is committed to minimizing non-renewable energy usage by transitioning to clean energy sources such as solar energy for purposes such as lighting the campus.

Energy Saving and Energy Efficient Equipment

We pledge to install environmentally efficient electrical appliances that save energy and cut down on trash. The college believes in adopting environmentally friendly energy sources such as LED lighting.

ACTION PLAN

ENVIRONMENT

- Observance of important days such as ozone day, environment day, earth day, and so on.
- Organize a pollution awareness campaign and take preventative actions.
- Conduct frequent green/environmental audits and take corrective action as needed.
- Ensure that clean campus practices such as correct waste disposal, e-waste campaigns among stakeholders, rain water harvesting, and monitoring judicious water usage are followed up on and updated on a regular basis.
- Activities that promote recycling, reuse, repair, and refurbishment, among other things
- Deliver an invited discussion (at the department/college level) on various policy updates and environmental studies.
- Establishment/revitalization of an Energy Management Cell (instead of energy audit cell)
- Once every six months, do a review of the company's green/renewable energy projects and audit its maintenance records.

ENERGY

- Restructuring the Energy Management Cell with representation from all departments to ensure that the energy management programme is implemented effectively.
- Monitoring and benchmarking resource utilization and waste generation on a regular basis.
- Keep track of and analyze your energy efficiency.

- Establishing short- and long-term goals, as well as conservation methods, in order to meet and exceed zero-carbon Campus objectives.
- Use of energy-efficient equipment with a star rating.
- Maintenance and replacement of additional lights/lighting fixtures with LEDs on a regular basis.
- Maintaining a sustainable approach by extending the life of existing equipment and replacing it with more efficient equipment as necessary.
- Before going on to the Replace & Recycle stage, reduce e-waste as much as possible with good maintenance.
- Make the most of natural light for indoor illumination and ventilation.
- To save energy, employ occupancy sensors in classrooms, hallways, administrative offices, and toilets, as well as sensor-based switches for streetlights and corridor lighting.
- Optimal temperature settings for air conditioners and water coolers are fine-tuned.
- Increase the use of renewable energy by installing a Grid Interactive Solar PV System on campus.
- Appropriate reactive power management maximises demand.
- Encourage students to work on UG and PG projects related to energy management, energy optimization techniques, and renewable energy harvesting, in order to raise knowledge about energy usage and cost.
- Provide energy management and energy auditing training to staff and students.
- Develop project-based learning methodologies for energy conservation and management courses in collaboration with industry.
- The Energy Management Cell should establish well-defined procedures that follow the stages outlined below.
 - Create an energy baseline assessment
 - Define the academic year's energy agenda
 - Develop implementation instructions
 - Review: Follow-up and monitoring
 - A spreadsheet or checklist to keep track of the Energy Management Action Plan's short- and long-term objectives.