HINDU COLLEGE

UNIVERSITY OF DELHI

GREEN POLICY

ENVIRONMENT AND ENERGY USAGE POLICY

Green Policy

Introduction

By establishing a strict green policy in compliance with the National Environment Policy, Hindu College is dedicated to protecting and preserving the environment. In order to preserve a safe and healthy environment for both the present and future generations, it constantly works to maintain an eco-friendly, green campus, instil the concept of sustainable development in the minds of youth, and train them in the management of renewable and non-renewable resources and waste.

Scope

The green policy and code outlined below must be followed by all parties involved with Hindu College, including management, employees, students, and others who utilise the site.

The institutional green committee's membership shall be as follows:-

- Principal (Chairperson)
- Vice Principal
- Convenor of the Building Committee
- Senior Faculty Nominee
- Faculty Member Nominees
- External Member (Industry Nominee)
- Student Coordinators

The aforementioned shall be the members of the committee.

Responsibilities and obligations of the Committee

i. The Institutional Green Committee will be in charge of organising, carrying out, and overseeing the institution's environmental efforts.
ii. Encourage neighbourhood residents and stakeholders to be environmentally sensitive and sustainable.
iii. Identifying alternative energy sources and energy-saving measures
iv. Implementing efficient waste management strategies to reduce pollution
v. Identifying and implementing water conservation strategies
vi. Undertaking and monitoring green initiatives on campus
vii. Reviewing and implementing the recommendations resulting from the Green Audit Energy-saving measures

The institution's members must make every effort to employ alternative energy sources and preserve energy in order to safeguard the environment for both current and future generations.

The policy recommends that the following alternative energy sources need to be utilised in order to maintain environmental sustainability.

Solar Power
Solar roof top PV systems must be used to capture solar energy, ensuring that the maximum amount of electricity is produced while adhering to the standards established by the Commission of Alternate Sources of Energy (CASE), a division of the Ministry of New and Renewable Energy (MNRE), Government of India.

Biogas
The institution shall investigate the viability of using biogas as an alternative energy source.
use sensors to conserve energy
Smart technology utilised to save energy by utilising sensor-based mechanisms to allow lighting, fans, and other equipment that uses little electricity to be used extensively.

Sensor based energy conservation
- All new building structures must be designed to run with appropriate cross ventilation and natural illumination to prevent artificial lighting and cooling in order to achieve electricity efficiency. In order to further minimise power use on campus, the college must consciously choose energy-efficient equipment when making purchases.
- Using LED Lighting
- All new buildings must have LED lighting as an energy-efficient institution. LED lighting will be installed in place of the current lighting systems in classrooms, labs, auditoriums, halls, and hallways.
- Utilizing Energy-Efficient Equipment
- Only equipment with a star rating—refrigerators, air conditioners, microwaves, deep freezers, etc.—shall be purchased as per institutional best practises. LED monitors will be used in the staff areas, offices, and computer labs. Additionally, the current TFT monitors will eventually be phased out.

Policy for Waste Management
Systematic waste management is one of the green policy's main areas of concentration. By segregating, reusing, recycling, and composting waste, the university aims to adhere to waste management regulations, reduce waste produced on campus, and lessen its environmental effect. Through orientation, circulars, announcements, and signs in conspicuous locations, all institution stakeholders will be made aware of the value of a clean, green campus. Additionally, there must be a well-organized system for the classification, minimization, collection, segregation, treatment, and disposal of both solid and liquid waste.
Composting techniques will be used by the institution's management of biodegradable waste, and the resulting compost will be used as bio-fertilizer to support the campus's flora. In addition, the organisation will investigate the viability of producing biogas from degradable trash.
To reduce environmental pollution, the institution must have a well-organized system for reducing, recycling, and reusing non-biodegradable trash.

Waste Management of Solids

The institution's solid waste management procedures must adhere to the standards set by the International Institute of Waste Management. By adhering to the following standards, a structured, methodical, and multi-level solid waste management process must be put into place:

i. Bins that are color-coded and labelled must be placed in classrooms, auditoriums, cafeterias, labs, corridors, washrooms, quadrangles, open areas, and parks in order to separate and collect waste at every level of the organisation.

ii. Personnel should be hired specifically to assist with garbage collection, segregation, treatment, or disposal.

iii. The collected paper trash must be delivered to an authorised recycling facility.

iv. The BBMP-approved plastic waste collection centres should receive the plastic and glass garbage.

v. A biogas plant must be used to treat wet waste. Vermicomposting will be used to treat the garden waste, and the finished product will be used as bio fertilizers.

vi. Sanitary napkins, sharp objects, and needles must all be burned separately in incinerators.

Waste Management of Liquids

To recycle liquid waste, the institution must have a sewage treatment facility. To make toxic liquid waste from laboratories non-toxic, bioremediation and phytoremediation should be used.

The Biomedical Waste Management Institution must handle biomedical waste from laboratories with extreme caution and dispose of it in a way that minimises environmental risk. The management of biological waste will be done in accordance with the following standards.

Laboratory biosafety measures for the proper handling and disposal of biological waste must be visible.

ii. Other than sharps, biomedical waste should be collected in sturdy, break-resistant containers that are labelled red.

iii. Discarded sharps ought to be gathered in different boxes.

iv. The proper handling of biomedical waste is only permitted by trained laboratory staff.

v. The standard storage period for the separated biomedical waste should be followed.

vi. To avoid any health and environmental risks, biomedical waste should be autoclaved, burned, or disinfected.

Management of E-Waste

E-waste management is the responsibility of the IT maintenance division. At the very beginning of the procurement process, a structured plan for managing e-waste must be developed. The following standards will be used to manage e-waste.

i. To ensure the prompt collection and recycling of e-waste, an MoU must be executed with an authorised e-vendor.

ii. The maintenance division is responsible for organising the annual collection and destruction of the e-waste.

iii. Outdated technology must be utilised to study the hardware component.

Effective measures must be put in place by the Hazardous Chemicals and Radioactive Waste Management Institution to stop hazardous and radioactive waste from being combustible, corrosive, reactive, and poisonous. For this, the following standards will be implemented:
i. Laboratories must indicate procedures for handling and getting rid of hazardous material safely.
ii. Strong containers (coded red) should be used to collect hazardous waste to prevent breaking.
iii. Labelled protective containers made expressly to hold radioactive waste should be used to collect radioactive waste.
iv. Only certified laboratory staff should be permitted to handle radioactive and hazardous waste while taking all necessary safety procedures and doing so in a radiation prevention chamber.
v. The segregated hazardous waste should not be kept for longer than the permitted amount of time.
vi. Biosafety regulations set forth by the institution should be followed when autoclaving and disposing of hazardous biological waste.
vii. Hazardous chemical waste should be neutralised or diluted before being disposed of outside the building using separate plumbing that connects to separate collection tanks.
viii. The Safe Disposal of Radioactive Waste Rules, 1987 of the Department of Atomic Energy shall be followed while disposing of radioactive waste.

Waste Recycling System
Institution must have a waste recycling system that allows for the reuse of materials with potential for use and minimises the consumption of new raw materials, which in turn saves energy and lessens pollution.

Recycling System for Solid Waste
The recycling of solid waste will be governed by the following standards.
i. The primary sources of paper waste generation must be located, collected, and delivered to the designated paper recycling unit.
ii. The main sources of plastic waste generation must be located, gathered, and transferred to accredited plastic recycling facilities.
iii. The institution is not allowed to employ thermocol in any way.
iv. Metal scrap must be recycled by certified companies.
v. Recycled wood waste must be used to make new furniture.
vi. Recyclable construction trash must be disposed of properly.

Waste Recycling for Liquids
For recycling liquid waste, the following standards will be put into place:
i. After being treated at a sewage treatment plant, the generated sewage water must be recycled (STP).
ii. A system for collecting and using rainwater should be in place.
iii. Water waste produced during the filtration of water from reverse osmosis units must be recycled and put to good use.

Conservation of water

The institution must make an effort to recycle used water and save water. A methodical, well-thought-out, structured technique must be used to preserve water in all of its forms in order to achieve this goal.

Rainwater Collection and Harvesting

For the collection of rainwater, the following standards will be put into place:

i. A sizable portion of the campus's water demand must be satisfied by rainwater.

ii. The annual rainwater should be gathered as much as possible.

iii. A well-designed scientific system for gathering, filtering, and storing harvested water must be devised and put into action.

iv. Specialized rainwater storage tanks must be built, maintained, and used as a backup source of water.

Recharging a borewell or open well

i. Only when necessary should borewells be drilled, and existing borewells should be recharged by building recharge pits. Borewell and open well recharge shall be provided for building of Bunds and Tanks
ii. The institution must build more storage tanks or bunds to hold extra water that can be redirected during intense downpours.
iii. Institution is responsible for the appropriate maintenance and protection of the waterbodies on campus as well as the installation of a suitable distribution system for the use of the water that has been stored.

Towards a Green Campus

- The College should make efforts to promote environmental awareness and sustainability among its constituents and should uphold an environmentally friendly campus with the necessary precautions and practises.
- Certification for a Green Campus
- The institution must make a long-term commitment to the campus community's ongoing environmental improvement. It will work to achieve green certification and national environmental benchmarks.
- Vehicle Entry Restrictions
- In order to prevent pollution, the institution must limit the number of vehicles allowed on campus. The majority of the campus must be accessible by foot, bicycle, or electric vehicle. Using bicycles
- Bicycle use for transportation within the university will be promoted. Utilization of Electric Vehicles (Battery-Powered Vehicles) Institution shall promote the usage of electric vehicles for transportation among its members. To reduce carbon emissions, campus transportation must be provided by electric vehicles. For the convenience of recharging electric vehicles, sufficient charging points must be installed. The institution's electric vehicles must also be able to carry visitors and students who are Divyangjan.
- Pedestrian-friendly walkways

- There will be designated pedestrian-only areas with access restrictions for vehicles to ensure their safety. Signs must designate different paths for automobiles and pedestrians. The pedestrian walkways must be kept covered in greenery.

Ban on the Use of Plastic

In all of the campus facilities, the university must adhere to a "zero single use plastic usage" policy. There will be an effort to reduce the use of other types of plastic that are less than 50 microns in thickness. We must look for real substitutes for single-use disposable plastics, from the reuse idea to compostable goods.