

THE UNIVERSITY OF BURDWAN



Environmental/Green policy

I. Prelude

Environmental policy is the commitment of an HE organization or government to the laws, regulations, and other policy mechanisms concerning environmental issues. These issues generally include air and water pollution, waste management, ecosystem management, maintenance of biodiversity, the management of natural resources, wildlife and endangered species. Concerning environmental policy is the implementation of an eco-energy-oriented policy at a global level to address the issues of global warming and climate changes. Policies concerning energy or regulation of toxic substances including pesticides and many types of industrial waste are part of the topic of environmental policy. This policy can be deliberately taken to influence human activities and thereby prevent undesirable effects on the biophysical environment and natural resources, as well as to make sure that changes in the environment do not have unacceptable effects on humans. Environmental issues typically addressed by environmental policy include (but are not limited to) air and water pollution, waste management, ecosystem management, biodiversity protection, the protection of natural resources, wildlife and endangered species, and the management of these natural resources for future generations. Environmental policies often address issues in one of three dimensions of the environment: ecological (for instance, policies aimed at protecting a particular species or natural areas), resource (for instance, related to energy, land, water), and the human environment (the environment modified or shaped by humans, for instance, building/Land use & Land cover planning, pollution). In contrast to environmental policy, ecological policy addresses issues that focus on achieving benefits (both monetary and non-monetary) from the non-human ecological world. Broadly included in ecological policy is natural resource management (fisheries, forestry, wildlife, range, biodiversity, and at-risk species).

II. Introduction

Environmental/ Green Policy is that it comprises two major terms: Environment and Policy. Environment refers to the physical ecosystems, but can also take into consideration the social dimension (quality of life, health) and an economic dimension (resource management, biodiversity). Policy can be defined as a "course of action or principle adopted or proposed by a government, party, business or individual". Thus, environmental policy tends to focus on problems arising from human impact on the environment, which is important to human society by having an (negative) impact on human values. Such human values are often labelled as good health or the 'clean and green' campus environment. In practice, policy analysts provide a wide variety of types of information to the public decision-making process. University respects a good relationship with the natural environment and its ecosystems. We acknowledge the adverse impacts that human activity can impose and take actions to prevent degradation of those natural systems and

prevent the degradation of those natural systems. We recognize the specific effects of our academic activities on the natural environment and our responsibility as a good corporate citizen to ensure a sustainable natural environment.

The term "**Green**" means eco-friendly or not damaging the environment. This can be acronymically called "**Global Readiness in Ensuring Ecological Neutrality**" (GREEN).

Green Policy helps to provide a systematic identification, quantification, recording, reporting, and analysis of components of environmental diversity. The aims of 'policy' are to analyze environmental practices within and outside the institute campus, which will impact the eco-friendly ambiance and improve the condition of the environment.

Environmental Policy includes the plant community, greenery, and campus sustainability to ensure that the infrastructures/buildings conform to green standards. It also helps to follow the practices as per Environmental Policy.

The policy also includes the methodology of preparing and filling out a questionnaire, physical inspection of the campus, observation, and review of the documentation, interviewing key persons, data analysis, measurements, and recommendations; it works on several facets of 'Green Campus,' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy, and Biodiversity mapping.

Green policy is assigned to Criteria 7 of NAAC, which embraces its main pillars: zero environmental footprint, positive impact on occupant health and performance, and 100% graduates demonstrating ecological literacy. The goal is to reduce CO₂ emissions, waste generation (on-site/off-site), energy, and water use while creating an atmosphere where students can learn and be healthy.

III. Key Components of Environmental Policy

An environmental policy serves as a roadmap for the University to define its commitment to sustainable practices and outline strategies to minimize their ecological impact.

The critical components of an environmental policy template and a step-by-step guide to creating it.

- i. This Environmental Sustainability Policy formalizes our commitment to supporting the principles of environmental sustainability and recognizes that a sustainable environment is maintained in our workplace.
- ii. The University of Burdwan is committed to managing its activities to promote environmental sustainability, conserve and enhance natural resources, prevent pollution, and improve environmental performance.
- iii. This environmental Sustainability Policy aims to integrate a philosophy of environmental sustainability into the organization's activities and establish and promote sound environmental practices in our operations. It will be achieved this way:

- a. Inform staff and all stakeholders of our commitment to environmental and sustainability.
- b. Supporting the implementation of environmental actions within our University.
- c. Monitoring the progress of those environmental actions.
- d. Communicating the outcome of those environmental actions to relevant stakeholders.

IV. Objectives of Environmental Policy

The specific objective of the Environmental Policy of the University of Burdwan is to reduce its environmental impact.

These objectives should be measurable, time-bound, and aligned with relevant sustainability goals.

This could include carbon neutrality, greenhouse gas emissions, water usage, waste generation, or biodiversity conservation.

Create provisions to include initiatives such as a green campus, a clean and safe campus, implementing energy-efficient technologies, promoting recycling programs, or investing in renewable energy sources.

V. Roles and Responsibilities of Stakeholders

The University of Burdwan owns this policy. It was adopted on June 06, 2022 and will be reviewed after every two years of action. Changes may be made at any time based on guidance or amended organizational priorities.

Suggestions for changes or additions to this policy are welcome and should be reported to the entrusted Green Committee.

VI. Coverage of the Policy

This policy covers all students, teachers, non-teaching members, officers, directors, consultants, contractors, volunteers, alums, interns, casual workers, and agency workers.

Clearly define the roles and responsibilities of stakeholders for the successful implementation of an environmental policy.

Must specify tasks related to environmental management and sustainability.

Starting from top administration/management, department heads or designated teams will be responsible for specific areas such as energy management or waste reduction.

Emphasize the creation/generation of awareness in achieving environmental goals through programs.

Steps to encourage all stakeholders to take responsibility for their actions on environmental awareness.

VII. Monitoring and Review

Regular monitoring and review are essential to ensure that environmental policy remains effective over time.

Identify key performance indicators (KPIs) that will be used to measure progress towards environmental objectives.

These could include energy consumption, waste reduction, or water usage metrics.

Explanation of data collection and analysis to track progress.

This could involve regular audits, data collection systems, or third-party certifications prescribed by authority.

A review policy is needed to ensure that the organization remains adaptable to new environmental challenges and can update its strategies and objectives.

VIII. Terminology

Campus means Golapbag, Rajbati, Tarabag, hostel premises, farmhouses, staff residential houses, and guest houses.

Department means – All academic, administrative, centers, *etc.*

IX. Principles & Practices

The University of Burdwan commits to the following principles and practices:

- i. Monitor and manage environmental performance and work towards targets to reduce adverse impacts.
- ii. Comply with all relevant international, national, state, and local environmental policies, regulations, legislation, and institute-specific best practices.
- iii. Reduce the consumption of natural resources in daily operations, including water, paper, and energy.
- iv. Maximising the recycling of resources.
- v. Disposing of all waste appropriately and minimizing waste sent to non-recyclable disposal sites.
- vi. Committing to the principles of preventing pollution to the environment and continual improvement in our environmental management.
- vii. Minimising pollution by taking steps to limit carbon emissions resulting from vehicles.
- viii. This policy will be reviewed annually, and targets and performance will be measured as part of that review.

X. Policy Formation

Preparation of green policy

Establishment of the University Environmental Committee

Under the umbrella of this Committee, the following committees may be constituted and will function

- i) Advisory Committee: Chairman, Head of the Institute & one Convener

- ii) Environment Management Committee - Coordinator
- iii) Energy Management Committee - Coordinator
- iv) Waste Management Committee - Coordinator
- v) Water Management Committee - Coordinator
- vi) E-waste & Radioactive Waste Management Committee - Coordinator
- vii) Institutional Biosafety Committee - Coordinator
- viii) Animal Ethical Committee - Coordinator
- ix) Biodiversity Register Committee - Coordinator
- x) Policy on health surveillance of the faculty/students/research scholar handling radioactive/microbiological wastes - Coordinator
- xi) Wide publication of DOs & DONOTs in and around the campuses/departments - Coordinator

3. Reward/Appreciation to the Committee/Group for good work

XI. Provisions of Policy

1. Natural Environment and Assets

The University of Burdwan commits to increasing opportunities for nature to thrive on the assets we own, lease, or manage, including land, water, and air.

We are committed to maintaining biodiversity and will work to ensure our actions on the assets we own or manage do not harm the natural environment and will support biodiversity.

2. Purpose

This document describes the university's environmental policy and procedures for conducting operations and activities in an environmentally responsible and sustainable manner.

3. Background

The University of Burdwan created/prepared this Policy in the year 2022-23 in the name of "Burdwan University Environmental Policy" of The University of Burdwan to officially declare a commitment to protecting the environment and responsible use of natural resources. As the steward of academic, administrative, and student behavioral research for the Nation, the University of Burdwan pursues knowledge about living systems and applies the knowledge to extend a healthy atmosphere/campus and reduce pollution and hazards. As proactive public health and environment keepers, the University of Burdwan community embraces pollution prevention and sustainable development while continually seeking to reduce resource consumption.

The University of Burdwan Environmental Policy establishes the following essential commitments:

- Compliance with all federal, State, and local environmental laws, regulations, and Executive Orders.
- Prevent pollution by minimizing waste generation where possible, reducing consumption, recycling materials, and disposing of wastes in an environmentally responsible manner.
- Integration of environmental and health considerations of all the stakeholders into decision-making processes.
- All the stakeholders of The University of Burdwan are responsible for being aware of the environment, maintaining a clean/safe campus, and continually striving to minimize these impacts as outlined in this policy.

4. Policy documents

The University of Burdwan is committed to complying with all applicable laws and regulations. We recognize that reducing and, where possible, eliminating the environmental impacts of our activities is an integral part of our mission as stewards of institutional health/students' health. We strive to be a leader among the HEIs and Centers in achieving environmental excellence and will work with our employees and other internal and external entities to establish and follow principles, in conjunction with the Environmental Policy of The University of Burdwan, that will guide the environmental practices of the University.

The Policy of the University, the guiding principles, and practices to achieve resource conservation, waste reduction, and sustainability overall are summarised below:

- Comply with mandatory requirements, conduct activities, and operate our facilities within applicable environmental laws and regulations.
- Conserve energy and other natural resources.
- Encourage stakeholders to use mass/public transit.
- Reduce, reuse, and recycle to reduce waste.
- Minimize the production of hazardous waste.
- Adopt green procurement practices/tree plantation/monitoring through student involvement.
- Ensure all employees complete the environmental awareness training.
- Continue to review and minimize the impacts of activities.

5. Responsibilities

a. Responsibility of all Stakeholders

- ✓ Turn off lights when not in use and use natural light when possible.
- ✓ At the end of every work day, turn off all computers, terminals, speakers, and other office equipment, not just log off.
- ✓ Turn off your power strip at the end of every workday.
- ✓ Activate the power-down features on your computer and monitor to enter into a low-power or sleep mode when not in use.

- ✓ Unplug equipment that drains energy even when unused (e.g., cell phone chargers, fans, coffee makers, desktop printers, radios).
- ✓ Use LED as much as possible/replace the non-functional incandescent tube lights/lights whenever possible.
- ✓ Utilise videoconferencing and conference calls as an alternative to travel when possible.
- ✓ Reduction of Materials Consumption

i. Teaching staff

- ✓ Ride mass/public transit or other alternative forms of transportation whenever possible.
- ✓ Use carpools or vanpools when possible, and avoid single-use cars/celebration of 'No Vehicle Day'
- ✓ Minimise waste and increase recycling.
- ✓ Use durable, reusable beverage containers, plates, and utensils.
- ✓ Reduce the amount of toner in documents that will be printed when possible.
- ✓ Print documents in black and white or grayscale whenever possible.
- ✓ Recycle paper, paper products, plastic, binders, folders, catalogs, boxes, bottles, cans, batteries, electronics, toner and ink cartridges.
- ✓ Recycling plastic and paper products by rules such as recycling will be developed by the Green Team.
- ✓ Administration shall:
- ✓ Dispose of used furniture and electronics properly.
- ✓ Do not use or purchase mercury or mercury-containing equipment unless approval has been obtained.
- ✓ Purchase chemicals in the most minor quantities needed to avoid over-ordering.
- ✓ Dispose of hazardous chemicals appropriately and by the Disposal Guide and other legal requirements.

ii. Office Staff

- ✓ Avoid using paper by distributing and storing documents electronically.
- ✓ Print and photocopy only what you need and double-side your jobs when possible.
- ✓ Tell staff and colleagues that you prefer double-sided documents.
- ✓ Use the back side of old documents for faxes, scrap paper, or drafts.

b. Commitment to Green Purchasing

- ✓ Purchase copier and printer paper that contains at least 30% post-consumer recycled content.
- ✓ Purchase office supplies and furniture with the highest percentage of recycled and non-toxic content whenever possible.

- ✓ Purchase products that contain bio-based content whenever possible.
- ✓ Use the Electronic Product Environmental Assessment Tool (EPEAT) to identify computers and monitors with environmental attributes and purchase those with at least a Bronze rating.
- ✓ Purchase quality furniture and electronics goods.
- ✓ Create increased awareness amongst students, teaching, and non-teaching staff members regarding the impact on the environment and health.

c. Waste and recycling

The university is committed to keeping waste to an absolute minimum by preventing, reusing, recycling, or recovering waste wherever possible. We will ensure waste is sorted, stored, and disposed of properly and sustainably in all our locations.

We aspire to be a zero-waste organization. We will achieve this by the ways of:

- a. Phasing out the use of single-use plastics.
- b. Recycling 100% of recyclable material.
- c. Reducing the use of non-recyclable material and offsetting where this is impossible.
- d. Promoting and encouraging recycling by all staff.
- e. We use recyclable, compostable, and recycled products on our premises.
- f. Reducing the production of non-recyclable resources such as laminated or plastic-based publicity material.
- g. Minimise the amount of printing and wastepaper.
- h. Using electronic communication as our primary method of communication and using an opt-in scheme for paper-based communication.
- i. Minimising pollution and preventing it wherever possible, including light, noise, solids, liquids, and chemicals.
- j. Promoting the use of composting for organic waste.
- k. Our primary motto will be to reduce our carbon footprint.

d. Reduction in emissions

- a. Undertake an energy audit
- b. Produce a plan to reduce our energy usage.
- c. Produce a plan to switch to 100% renewable energy procurement.
- d. Installation of SOLAR PANELS/SOLAR STREET LIGHTS can be used on our assets.

XII. Information technology and sustainability

The university will use certified sustainable PCs, laptops, monitors, mobile devices, and network and server hardware.

All equipment must be disposed of correctly through an approved e-waste recycling contractor.

No IT equipment should be sent to landfill or thrown out.

The university will make applications and systems available to reduce the need for printing paper and use personal printers where they are not required.

Conducting awareness programs/Training and staff involvement

1. The university will encourage all staff to undergo training on environmental sustainability and climate change.
2. The university will aim to raise awareness of environmental sustainability across our operations.
3. The university will encourage collaboration and involvement among all staff members in environmental sustainability efforts.
4. The university will establish a sustainability steering group to drive involvement and stewardship of sustainability across the organization.

XIII. Execution part

- i) Create a budgetary head for the university's annual budget.
- ii) Betterment of e-governance and paperless administration.
- ii) Preparation of the number of Primary Treatment Plants/STP/ETP at the Golapbag Campus
- iii) Preparation of composting pits at different places like Golapbag/Hostels/Canteen/Guest House/Farm House
- iv) Safety measurement of microbiological organisms, in particular, Botany, Biotechnology, Microbiology, Zoology, etc., departments
- v) Safety measurement of radioactive wastes generated on-site at departments of Physics and Chemistry.
- vi) Policy for destroying and recycling waste/discarded papers, certificates, exam copies, confidential papers of more than ten years, etc.
- vii) CRSMF, KSG, Lahar, and different water bodies inside the Golapbag campus be used for Ecosystem assessment and experimentation for Research scholars, students, faculty members
- viii) Evaluation of drinking water quality for consumption and reuse of grey water for conservation.
- ix) Preparation of year-wise report from every committee and placed before the Advisory Committee – Good working Committee/Group be rewarded with a token of appreciation; direct student involvement be assessed regularly and may be counted as performance appraisal.

XIV. Identification of environmental issues

- i) Identify existing plants with proper register-keeping records like mapping, name, age, height, canopy, coverage area, and regular plantation.
- ii) Measurement of carbon neutrality year-wise analysis, carbon footprint, and water footprint.

- iii) Monitoring of terrestrial weeds in and around the campus.
- iv) Maintenance of water bodies, including Lahar, for productive purposes like aesthetics, pisciculture, makana-cum-fish culture, and preparation of a profile of water quality parameters.
- v) Maintenance of liquid waste, drainage system, and final disposal site.
- vi) Proper disposal mechanism of solid wastes, construction & demolition wastes, and other infrastructural wastes generated from different sources.
- vii) Maintenance of all types of wastes generated from laboratories.
- viii) Maintenance of microbiological wastes and radioactive wastes.
- ix) Maintenance of e-waste from different departments.

XV. Management aspects

- i) Regular cleaning and washing of the departments, toilets, etc.
- ii) Construction of more toilets for girls and lady faculties, lady officers, etc.
- iii) Preparation of daycare center.
- iv) Regular monitoring of drinking water quality of hostels, canteen, departments, residential areas, and health center, regarding pH, TDS, MPN, in particular.
- v) Regular checking of Roof-top tanks, water leakage, uncontrolled excess flow/wastes.

Disposal Policy

- ✓ They are framing the rules and guidelines with local administration/municipality/govt. Authorized agencies for disposal of different types of wastes, cleanliness of campuses, departments, drainage system, and disinfectant process.
- ✓ Preparation of incinerators for radioactive wastes/microbiological wastes, etc./biological or animal wastes.
- ✓ Engagement of different agencies/groups as per Govt. license holders with annual maintenance contract – continued based on the feedback report.

XVI. Energy management

- i) Installation of one main switch/MCP for operating the whole department/ building electrical control system.
- ii) All departmental spaces/rooms should be marked with proper numbers.
- iii) Estimating electrical connectivity at every point, like several tube lights, fans, LED, ICT-based instruments, PAS, computers & accessories/peripherals.
- iv) Estimation of electricity consumption in the campus/departments – may be awarded/incentives for those for less consumption year-wise.
[A team of electrical professionals will visit and prepare the data]

XVII. Monitoring system

- i) Every campus/department will be declared a "Plastic Free Area".
- ii) Every department in the different campuses be involved in the process of institutional responsibility programs like campus cleaning/outreach pgm/social awareness pgm/preparation of biodiversity register/preparation of bird nesting/maintenance of front garden/maintenance of particular plants with register/collection and disposal of leaf-litter for composting/watershed management *etc.*, guided by at least one teacher.
- iii) The department must form student volunteer groups—preferably, students of First SEM will be involved, and two credit scores will be added as an outreach program in SEM III/IV as per the syllabus as a regular/continuous system.
Credit Score will be awarded in the presence of the Head/TIC and any one of the members of the Green Committee
- iv) Rs 5000/- will be provided as an advance to every department as a one-time grant for this activity (this may be rationed per the number of students).

XVIII. Formation of Different Committees**i) Advisory Committee:**

Chairman, Head of the Institute
 Convener
 Registrar
 Deans of the Faculties
 Senior members of faculties

ii) Environment Management Committee

Coordinator
 Members of different departments
 One/Two student(s) representative

iii) Energy Management Committee

Coordinator (Preferably Engineer)
 Electrical Engineer
 One/Two student(s) representative
 Other members

iv) Waste Management Committee

Coordinator (Faculty from Chemistry/Physics)
 Members from local administration/municipality
 One/Two student(s) representative

vi) E-waste & Radioactive Waste Management Committee

Coordinator (Faculty from Chemistry/Physics)
 Member from Biosafety committee/Animal ethical committee
 One/Two student(s) representative

- vii) Institutional Biosafety Committee
 - Coordinator (existing as per Central Govt. Policy)
 - One/Two student(s) representative
- viii) Animal Ethical Committee
 - Coordinator (existing members)
- ix) Biodiversity Register Committee
 - Coordinator (preferably from Botany/Zoology)
 - Other members
- x) Policy on health surveillance of the faculty/students/research scholar handling radioactive/microbiological wastes
 - Coordinator
 - One Doctor from the Health Centre
 - Other members
- xi) Wide publication of DOs & DONOTs in and around the campuses/departments
 - Coordinator
 - One/Two student(s) representative
 - Other Members

XIX. Conclusion

Creating an effective environmental policy is crucial for organizations committed to sustainability; following a well-designed template and considering the key components, a comprehensive environmental policy must be prepared and developed to align with the organization's values, goals, and legal obligations. An environmental policy is a document and a commitment to building a better future for our planet.



[Signature]

Vice Chancellor

**Vice-Chancellor
The University of Burdwan
Burdwan, West Bengal**