

Energy and Environment Policy



**Indian Institute of Information Technology Una
Himachal Pradesh**

Table of Content

Preamble	1
Vision and Objective	1
1. Water Management	2
1.1. Water Conservation	2
1.2 Waste Water Treatment	2
1.3 Rain-water Management	2
1.4 Monitoring and Assessment	2
1.5 Compliance with Standards	2
2. Solid waste management	2
2.1 Waste Reduction	2
2.2 Recycling and Reuse	3
2.3 Waste Disposal	3
2.4 Monitoring and Assessment	3
2.5 Compliance with Standards	3
3. Air Quality Management and Reduce Carbon Footprint	3
3.1 Air Quality Management	3
3.2 Sustainable Practices	3
3.3 Compliance with Standards	4
4. E-Waste Management	4
4.1 E-Waste Collection and Disposal Procedures	4
4.2 Recycling and Disposal	4
4.3 Sustainability Initiatives	4
4.4 Compliance with Standards	4
5. Energy and Environment Audit	4
5.1 Objectives	4
5.2 Different Stages of Audit	5
5.2.1 Pre-audit Stage	5
5.2.2 Audit Stage	5
5.2.2.1 Collection of data through observation and interaction:	5
5.2.2.2 Review of previous records and policies:	5
5.2.2.3 Inspection of departments/sections/various sites:	5
5.2.3 Post Audit Stage	5
5.2.4. Recommendations	6
6. Awareness and Involvement	6

Preamble

The IIIT Una stands as one of the renowned technical institutes with the core mission to achieve academic excellence and achievements. The Institute is conscious of the fundamental duties envisaged in the constitution of India and always tries to incorporate best practices at institutional levels to minimize the impact on the environment and ensure resilience and sustainability. The institute is committed to fulfilling 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 institute strives to reconcile institutional activities with environmental conservation for a safe and secure future in the era of climate change. The campus is spread over 63 acres of land, of which 45 acres are green cover. In order to ensure sustainable development, the current policy document has been prepared.

Vision and Objective

The Energy and Environmental Policies of the Institute provide an overview of the institution's vision to minimize the environmental impacts of its activities and operations and to manage available resources sustainably. The policy statement emphasizes the Institute's commitment to adopt environmental best practices and promote the sustainable use of resources within the campus and beyond. It outlines the key priority areas, and methods for implementing, managing, and evaluating environmental initiatives. The policy aims to reduce the consumption of energy and raw materials, thereby supporting the Institute's sustainability efforts. This policy communicates the administration's goals and objectives to employees, students, and staff, contributing to the creation of a better environment for future generations.

To accomplish this purpose, IIIT Una shall pursue the following objectives:

- a) The institute shall continue to comply with environmental legislation to minimize its environmental impact by pursuing various goals, including plantation, water management, energy conservation, solid waste management, air quality management, and carbon footprint reduction.
- b) Develop and maintain ISO 14001:2015 environmental management systems and ISO 50001:2018 energy management systems to ensure continuous improvement in environmental performance.
- c) Actively engage in collaboration with local organizations focused on the environment, energy efficiency, and sustainable development by maintaining communication with government agencies, municipal corporations, and affiliated institutes.
- d) Encourage a culture of environmental responsibility among students, staff, and stakeholders.
- e) Reduction in resource consumption.
- f) Conduct audits for the identification of areas that need improvements and make recommendations.
- g) Adopt the three R's formula: Reduce, Reuse, and Recycle.
- h) Promote environmental assessment initiatives.
- i) Raise awareness about keeping the campus clean and green.
- j) Establish sustainable practices on campus and among stakeholders
- k) Ensure the long-term viability and environmental protection of the organization.
- l) Review the policy at least once a year.

The Institute's energy and environmental policy will be pursued through the following priority areas:

1. Water Management

1.1. Water Conservation

- a) The institute, in future construction, shall implement water-saving technologies such as low-flow fixtures, water-efficient irrigation systems such as sprinkler or drip irrigation, and automated leak detection systems.
- b) The institute shall regularly monitor and maintain plumbing systems to prevent leaks and reduce water wastage.
- c) Use water-smart plants and xeriscaping in landscaping to minimize the need for irrigation.
- d) The institute shall take quick action to stop any water leaking from taps, pipelines, tanks, and toilet flushes, among other things.

1.2 Waste Water Treatment

- a) The institute shall ensure all wastewater is treated and reused wherever possible and should match the environmental standards.
- b) Regularly test water quality to ensure it meets health and safety standards.
- c) Implement best practices for the storage and handling of chemicals and other potential contaminants to prevent water pollution.
- d) The institution shall promote efficient water use techniques, such as sprinkler or drip irrigation, in its gardening activities.

1.3 Rain-water Management

- a) Promote practices that reduce surface runoff and enhance groundwater recharge.
- b) Install rainwater harvesting systems in all campus buildings for groundwater replenishment and water self-sufficiency.
- c) It will also support artificial recharge and the resurrection of traditional groundwater recharge processes.

1.4 Monitoring and Assessment

- a) Regularly review and update the water management policy to ensure its effectiveness and relevance.
- b) Establish a system for monitoring water usage and evaluating the impact of water conservation initiatives.
- c) Report on the institute's water management performance annually, highlighting key achievements and areas for improvement.

1.5 Compliance with Standards

- a) Ensure compliance with all local, state, and national water management regulations and standards.
- b) Shall comply with the drinking and wastewater disposal standards such as IS10500:2012 and IS 4764:1973, respectively.

2. Solid waste management

2.1 Waste Reduction

- a) The institute shall promote practices that reduce waste at the source, such as digital documentation, to reduce paper use and encourage the use of reusable items.
- b) Implement programs to reduce food waste in dining facilities, such as portion control and composting initiatives.

- c) The institute should encourage the purchasing of products with minimal packaging and those that are reusable or recyclable.
- d) Update the college library's e-books and e-journals collection to reduce the need for printed books.

2.2 Recycling and Reuse

- a) The institute shall establish a recycling program that includes paper, plastics, metals, glass, and electronic waste.
- b) The institute shall provide clearly labeled recycling bins throughout the campus.
- c) Promote the reuse of materials through initiatives such as campus-cleaning events, donation drives, etc.

2.3 Waste Disposal

- a) The institute shall ensure the safe disposal of non-recyclable waste by local regulations.
- b) The institute should develop and maintain facilities for the composting of organic waste.
- c) The institute shall have a contract with certified waste management service providers to handle waste that cannot be processed on-site.

2.4 Monitoring and Assessment

- a) Regularly review and update the solid waste management policy to ensure its effectiveness and relevance.
- b) Establish a system for tracking waste generation, recycling rates, and the success of waste reduction initiatives.
- c) Report on the institute's waste management performance annually, highlighting key achievements and identifying areas for improvement.

2.5 Compliance with Standards

- a) Ensure compliance with all local, state, and national regulations regarding solid waste management.
- b) Shall comply with the Environment Protect Act, 1986 (MSW management and handling, rules, 2000).

3. Air Quality Management and Reduce Carbon Footprint

3.1 Air Quality Management

- a) The institute shall conduct periodic assessments to identify sources of air pollution and areas needing improvement.
- b) The institute should maintain records of air quality data to track progress and identify trends.
- c) The institute should conduct energy audits to identify areas for improvement and implement energy-saving measures in all campus buildings.
- d) For future construction, the institute shall upgrade to energy-efficient lighting, heating, cooling, and electrical systems.

3.2 Sustainable Practices

- a) The institute should maintain good green cover to reduce the amount of CO₂ in the atmosphere.
- b) The institute should incorporate green building practices in new constructions and renovations to enhance indoor air quality.
- c) Implement landscaping practices that reduce the need for chemical fertilizers and pesticides.

- d) Promote the use of public transportation, carpooling, biking to come to the campus.
- e) Incorporate green building standards, such as LEED certification, in new constructions and major renovations.
- f) Encourage digital documentation and communication to reduce paper usage.

3.3 Compliance with Standards

- a) Ensure compliance with all local, state, and national air quality and carbon footprint regulations and standards.
- b) Shall comply with the Protection and Control of Pollution Act 1981(national air quality standards).

3.4 Monitoring and Assessment

- a) Report on the institute's air quality management and carbon footprint reduction performance annually, highlighting key achievements and identifying areas for improvement.
- b) Regularly review and update the air quality and carbon footprint reduction policy to ensure its effectiveness and relevance.

4. E-Waste Management

4.1 E-Waste Collection and Disposal Procedures

- a) Departments must complete an e-waste inventory form listing all items for disposal and submit it to the concerned committee.
- b) Before disposal, the data in the electronic devices must be securely removed, based on national standards, to ensure that all sensitive and personal data is irretrievable.
- c) E-waste shall be stored securely until it is transported to a certified recycling facility.

4.2 Recycling and Disposal

- a) E-waste will be sent to certified e-waste recycling firms that comply with the state regulations.
- b) The institute shall maintain records of e-waste disposal, including types of items disposed of, quantities, dates, and details of the recycling service provider.

4.3 Sustainability Initiatives

- a) Where possible, electronic devices will be refurbished and reused within the university before being classified as e-waste.
- b) Conduct regular training and awareness programs for staff and students about e-waste management and the importance of recycling electronic devices.

4.4 Compliance with Standards

- a) Ensure all e-waste management practices comply with local, state, and national regulations.
- b) Shall comply with the Environment Protection Act, 1986 (E-Waste Management Rules, 2024).

5. Energy and Environment Audit

5.1 Objectives

The main objectives of Environmental Audit in Academic Institution are:

- a) To identify the initiatives undertaken by the organization for environmental conservation.

- b) To assess the awareness of employees and students regarding environmental conservation.
- c) To ensure the appropriate utilization of natural resources in alignment with national environmental policies.
- d) To understand and evaluate the organization's impact on the environment and vice versa.
- e) To examine strategies for waste minimization and the safe disposal of waste, particularly hazardous waste.

5.2 Different Stages of Audit

There are three main stages of environmental audit:

- a) pre-audit stage,
- b) audit stage, and
- c) post-audit stage, and accordingly, the environmental audit should be conducted.

5.2.1 Pre-audit Stage

During the pre-audit stage, it is essential to identify the target areas for environmental audits, which should, at a minimum, include the following key areas:

- a) Water management
- b) Waste management
- c) Air quality management
- d) Environmental Awareness
- e) Green cover-related activities
- f) Involvement of nearby villages/society
- g) Disaster-related awareness

5.2.2 Audit Stage

5.2.2.1 Collection of data through observation and interaction:

This phase of the audit focused on gathering data through observations, interactions, and discussions with relevant stakeholders, including faculty, administration, and staff from various departments and sections of the university. To facilitate this, questionnaires shall be developed. Meetings should be held with specific stakeholders from different target areas identified during the pre-audit stage to collect data.

5.2.2.2 Review of previous records and policies:

This process is essential to understand the various initiatives undertaken by the university for environmental protection and improvement. For this purpose, the audit team should examine office registers, visitor logs, purchase records, and office communications. Additionally, reviewing published materials such as the university prospectus, annual reports, bulletins, and other magazines will provide valuable information and data on the targeted aspects.

5.2.2.3 Inspection of departments/sections/various sites:

The audit team should visit various departments, sections, and offices, as well as premises such as the playground, canteen, library, office rooms, and parking area, to gain an understanding of the activities being carried out. Additionally, they should assess campus greenery and identify any gaps as necessary.

5.2.3 Post Audit Stage

In this stage, audit report is formed which must contain an analysis of the following:

- a) Sources of air and water pollution

- b) Management of Energy Consumption
- c) Waste disposal and management
- d) Environmental Awareness
- e) Mitigation and Remedial Measures

5.2.4. Recommendations

Recommendations should be based on various aspects relating to the target areas identified in the audit stage and audit.

6. Awareness and Involvement

- a) To ensure that every member of the campus community is aware of the goals of the policy and actively engages in its execution, outreach and education will be crucial.
- b) The institute shall conduct awareness campaigns and training programs to educate students, staff, and faculty about the importance of environmental sustainability and how they can contribute to improvement efforts.
- c) The institute should integrate environmental and sustainability topics into the curriculum to foster a culture of environmental responsibility.
- d) In order to successfully execute the Green Campus, Energy, and Environment policies, the institution shall support conferences, workshops, seminars, and other interactive events.
- e) Contests on the theme of "Swachh Bharat" should be held for writing essays, spoken word poetry, posters and slogans, speeches, and skits.
- f) Rallies about the Swachh Bharat Abhiyan should be held on and around college campuses in an effort to increase public awareness.
- g) Important days like Earth Day, Ozone Day, and Environment Day should be observed by the institute.
- h) The institute should ensure that clean campus initiatives, like proper garbage disposal, stakeholder e-waste campaigns, rainwater harvesting and water-wise monitoring are routinely updated and monitored.
- i) Upholding a sustainable strategy by prolonging the life of current equipment and swapping it for more effective models when needed.
- j) Prior to proceeding to the Replace & Recycle phase, minimize electronic waste through proper maintenance.
