NIET MCA INSTITUTE Greater Noida

Noida Institute of Engineering & Technology (MCA Institute), Greater Noida

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Institute Environment Policy

1. Preamble

NIET, Greater Noida, is deeply committed to fostering a sustainable and ecologically responsible campus environment. This Institute Environment Policy outlines a comprehensive framework for monitoring, managing, and enhancing environmental quality within the campus and its surrounding areas. It embodies NIET 's dedication to implementing sustainable practices through regular audits and strategic interventions across key environmental domains, including energy, water, air, carbon management, waste handling, green infrastructure, and community outreach. This policy ensures systematic compliance with environmental standards while promoting a clean, green, and energy-efficient campus. The scope of this policy extends to all academic, residential, administrative, and service areas, emphasizing NIET's commitment to ecological responsibility and long-term sustainability.

2. Policy Objectives

i. To establish a robust framework for environmental quality monitoring and sustainability management.
ii. To minimize the environmental footprint of campus operations through resource optimization and pollution control.
iii. To integrate sustainable practices into all aspects of campus infrastructure, operations, and academic activities.
iv. To foster a culture of environmental awareness and responsibility among all stakeholders (students, faculty, staff, and the wider community).
v. To ensure compliance with national and local environmental laws, regulations, and best practices.
vi. To contribute positively to local environmental quality and community well-being.

3. Policy Framework and Key Areas

This policy is structured around eight core environmental management areas, each with specific objectives, provisions, and monitoring mechanisms.

3.1. Energy Management & Conservation Policy

Objective: To monitor, reduce, and optimize energy consumption across the campus and promote the adoption of renewable and energy-efficient technologies in alignment with sustainable development goals.

Purpose: This policy aims to ensure responsible and efficient use of energy resources within NIET by establishing a structured approach to energy management. This includes reducing energy wastage, lowering operational costs, minimizing environmental impact, and increasing the adoption of renewable energy sources.

Scope: This policy applies to all academic buildings, laboratories, hostels, administrative areas, recreational spaces, and campus infrastructure, covering both existing systems and future developments.

Policy Provisions:

i. **Regular Energy Audits:** NIET Business School mandates energy audits conducted by certified energy auditors or accredited third-party agencies. Audit findings are used to identify inefficiencies, suggest corrective actions, and develop implementation roadmaps. Reports are submitted to the Institute Infrastructure Maintenance & Sustainability Committee (IIMSC) for review and action.

ii. **Promotion of Renewable Energy:**
   a. **Solar Energy:** The campus maintains a grid-connected rooftop solar photovoltaic system with an installed capacity of 50 kWp, functioning under a net metering arrangement with Noida Power Company India Limited (NPCIL). Real-time monitoring tools track performance.
   b. **Biogas and Future Options:** The institute explores biogas systems using hostel food waste.
   c. **Piped Natural Gas (PNG):** The institute has dedicated connection of PNG for kitchen areas.

iii. **Energy-Efficient Appliances and Smart Systems:** All new procurements prioritize BEE (Bureau of Energy Efficiency) energy efficient rated appliances. Smart systems, like daylight sensors are installed in designated areas. Outdated or inefficient appliances are phased out.

iv. **Infrastructure Upgrades:**
   a. **Lighting:** 100% LED transition for all indoor, outdoor, and street lighting.
   b. **HVAC Systems:** Zoning of air conditioning systems and installation of inverter-based energy-efficient chillers.
   c. **Insulation & Design:** New constructions follow green building principles.
   d. **APFC Panels:** Automatic Power Factor Correction panels are installed to maintain high power factor and reduce distribution losses.

Implementation and Monitoring: The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC) oversees policy execution, performance monitoring, and documentation. Real-time energy consumption data is collected and analyzed using smart meters and sub-metering systems. Review meetings assess energy savings. Energy conservation awareness campaigns are conducted for all stakeholders.

Review and Compliance: The policy is reviewed annually based on audit outcomes, technological advancements, or regulatory changes. All implementations comply with guidelines from BEE, Electricity Authority, and applicable government frameworks.

3.2. Carbon Management and Sequestration Policy

Objective: To monitor, reduce, and offset the institution's carbon footprint through structured emission tracking, sequestration strategies, and campus-wide carbon neutrality initiatives.

Purpose: This policy establishes a framework for identifying, assessing, and mitigating carbon emissions generated by NIET 's institutional activities. The goal is to systematically monitor greenhouse gas (GHG) emissions and implement nature-based and operational solutions to foster a low-carbon, sustainable campus environment.

Scope: This policy applies to all academic, administrative, residential, transport, and support operations at NIET, covering Scope 1 (direct), Scope 2 (purchased electricity), and Scope 3 (other indirect) emissions.

Policy Provisions:

i. **Annual Carbon Footprint Assessment:** NIET conducts a Carbon Footprint Audit, accounting for Scope 1, 2, and 3 emissions using recognized protocols by a certified third-party auditor. Emission data is used for institutional sustainability reporting and mitigation planning.

ii. **Carbon Sequestration Measures:**
   a. **Tree Plantation Drives:** Annual programs in collaboration with Club, and local forest departments.
   b. **Green Belt Development:** Strategic development of green belts around academic blocks, boundary walls, and open spaces, including native and high carbon-absorbing plant species.

iii. **Promotion of Carbon Offsetting Initiatives:**
   a. **Composting Programs:** Food and garden waste are converted into compost using vermi-compost units, reducing methane emissions.
   b. **Paper Reduction and Recycling:** Digital documentation and double-sided printing are encouraged; used paper is sent for recycling.

iv. **Sustainable Transport Measures:** Promotion of carbon-free mobility through electric and PNG campus vehicles, bicycles, and walking paths. Installation of EV charging stations and battery-powered carts. Staff and students are encouraged to carpool or use public transportation.

Monitoring and Reporting: The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC) oversees implementation.

Policy Review and Compliance: The policy is reviewed as and when required based on feedback from stakeholders.

3.3. Air Quality Monitoring and Pollution Control Policy

Objective: To monitor, manage, and improve ambient and indoor air quality within the campus and ensure compliance with national environmental standards.

Purpose: This policy provides a structured framework for assessing, managing, and improving air quality at NIET, promoting a healthy campus environment by implementing real-time air quality monitoring, reducing pollution sources, and enforcing regulations.

Scope: This policy applies to all zones of the NIET campus, including academic blocks, hostels, laboratories, cafeterias, playgrounds, construction sites, and parking areas. It also governs practices involving vehicular emissions, chemical handling in laboratories, and waste management activities impacting air quality.

Policy Provisions:

i. **Installation of Air Quality Sensors:** Ambient air quality monitoring sensors are installed at key locations.
ii. **Indoor Air Quality Monitoring:** CO_2 levels are monitored in high-occupancy areas. Air purifiers and exhaust fans are installed in enclosed areas. IAQ norms are followed during HVAC maintenance.
iii. **Emission Control from Labs and Workshops:** Engineering laboratories are equipped with fume extraction systems, and local exhaust ventilation. Emissions from DG sets are monitored; silencers and scrubbers are installed.
iv. **Dust Suppression and Construction Management:** All construction projects follow a dust suppression protocol (green nets, water sprinklers, covered material transport, off-peak scheduling, ban on activities during academic hours). Contractors comply with guidelines.
v. **Green Barriers and Vegetative Buffering:** A green buffer zone of trees and hedges is maintained. Dense plantations in pollution-prone areas use air-purifying species.
vi. **Anti-Pollution Behavioural Regulations:** Strict prohibition on open burning of waste. NIET is a 100% smoke-free campus. Vehicular entry is regulated; only PUC-certified vehicles are permitted.

Monitoring and Compliance: The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC), is responsible for regular AQI data reports, initiating corrective measures.

Review and Governance: The policy is reviewed annually by The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC). NIET ensures compliance with National Ambient Air Quality Standards, Clean Air India Mission goals.

3.4. Water Management and Conservation Policy

Objective: To assess, conserve, and optimize water usage across the campus through systematic planning, metering, treatment, and reuse. This policy is separately defined.

3.5. Clean and Green Campus Policy

Purpose: To maintain an eco-friendly, visually appealing, and litter-free campus through sustainable landscaping, waste management, and environmental stewardship practices.

Objectives:

i. To maintain and enhance campus greenery through sustainable landscaping and biodiversity practices.
ii. To promote waste minimization, cleanliness, and discourage single-use plastics.
iii. To engage students and staff in environmental awareness and cleanliness drives.
iv. To align with national missions such as Swachh Bharat Abhiyan and Green India Mission.

Key Policy Components:

i. **Landscaping and Green Infrastructure:**
   a. **Tree Plantation and Green Belt Development:** Tree plantation drives focusing on native, drought-tolerant, and air-purifying species.
   b. **Lawn and Garden Maintenance:** Lawns maintained using electric mowers and treated greywater. Eco-friendly composted manure is applied.
   c. **Organic Gardening:** Dedicated organic gardening zones with vermicomposting units. Native flowering and medicinal plants are cultivated.
ii. **Waste and Litter Management:**
   a. **Ban on Single-Use Plastics:** Strict prohibition of plastic cutlery, bottles, and packaging in canteens, hostels, and common areas. Vendors comply with plastic-free procurement.
   b. **Litter-Free Campus Initiative:** Signboards displaying "No Litter Zone" and "Use Dustbins." A three-bin segregation system (Biodegradable, Non-Biodegradable, and Recyclable) is implemented.
   c. **Unregulated Signage Control:** Unauthorized banners, posters, and flex boards are strictly prohibited.
iii. **Eco-Friendly Landscaping:** Prioritizing indigenous flora that requires less water. Landscaping uses crushed stone mulch and permeable paving materials.
iv. **Campus Cleanliness and Awareness Campaigns:**
   a. **Swachh Campus Drives:** Quarterly cleanliness drives involving housekeeping staff and student volunteers. "Clean Classroom, Clean Corridor" campaigns.
   b. **Student-Led Sustainability Campaigns:** Green Ambassadors Program appoints student leaders. Annual observance of "Green Campus Week" with workshops and exhibitions.

Monitoring and Governance: The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC) oversees implementation and review.

Policy Compliance: Violations are addressed through verbal/written warnings, community service hours for students, and penalties for repeat violations by vendors/contractors.

3.6. Community Environmental Engagement & Outreach Policy

Purpose: To foster community-based sustainability practices by actively engaging in environmental outreach initiatives beyond the campus.

Objectives:

i. To involve students, faculty, and staff in environmental development activities in neighbouring rural and urban areas.
ii. To collaborate with local bodies, schools, NGOs, and other stakeholders for sustainable solutions.
iii. To promote awareness and behavioural change among the general public.
iv. To document and report outreach efforts transparently.

Scope and Coverage: This policy applies to all community-facing environmental initiatives led by NIET Business School, including those organized by student clubs, in association with village Panchayats, Municipal Councils, schools, NGOs, and other relevant bodies.

Key Policy Initiatives:

i. **Community Tree Plantation Drives:** Annual campaigns in nearby villages, urban slums, and government school campuses, prioritizing native species.
ii. **Water Body Cleanup and Restoration:** Restoration and cleaning of ponds, canals, and drains in nearby localities.
iii. **Eco-Education & Sustainability Awareness:** "Green School Mission" with sustainability workshops in local schools. Outreach programs in villages on topics like solar energy, rainwater harvesting, and organic farming. Distribution of eco-kits.
iv. **NGO and Government Body Collaboration:** Partnerships with organizations like TERI, CEE, Paryavaran Sanrakshan, and local forest departments. Joint participation in national campaigns (World Environment Day, Earth Hour, Swachh Bharat Abhiyan).

Monitoring and Governance: The Community Outreach Subcommittee oversees planning, implementation, and review. Feedback mechanisms include community surveys. Programs are aligned with the United Nations Sustainable Development Goals (SDGs).

Policy Review: The policy is reviewed every two years or as per evolving environmental and community needs.

3.7. Sustainable Transport and Mobility Policy

Purpose: To reduce vehicular emissions, promote eco-friendly commuting, and ensure safe, sustainable, and low-carbon mobility across the campus.

Objectives:

i. To minimize the environmental impact of commuting and intra-campus transport.
ii. To encourage the adoption of electric and non-motorized vehicles.
iii. To create a safe and walkable campus through designated mobility zones.
iv. To control vehicular emissions through entry restrictions and awareness.
v. To support low-carbon infrastructure such as EV charging stations.

Scope: This policy applies to all modes of transportation used by students, faculty, staff, and visitors within and to/from the NIET campus, including private vehicles, public transport, bicycles, and campus-operated vehicles.

Policy Provisions:

i. **Promotion of Non-Motorized Transport (NMT):** Development and maintenance of pedestrian-friendly walkways. Provision of secure bicycle parking infrastructure at key locations.
ii. **Electric Vehicle (EV) Adoption:** Installation of EV charging stations within the campus for electric cars and two-wheelers. Promotion of electric campus vehicles for internal logistics and staff commuting.
iii. **Public Transport and Carpooling:** Encouraging students and staff to utilize public transportation (buses, metro) and promote carpooling initiatives through awareness campaigns and designated carpool parking.
iv. **Regulation of Fossil-Fuel-Based Vehicles:**
    a. Monitoring logs for institute-operated fossil-fuel-based vehicles to track fuel consumption and emissions.
    b. Regulation of visitor vehicle entry during peak hours to reduce campus congestion and emissions.
    c. Only PUC (Pollution Under Control) certified vehicles are permitted entry into the campus.
v. **Awareness and Behavioral Change:** Regular awareness drives on the benefits of green commuting, the environmental impact of vehicular emissions, and the promotion of healthy lifestyle choices through walking and cycling.

Monitoring and Governance: The Transport In-charge, under The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC), monitors the implementation of this policy. Key performance indicators include reduction in fossil fuel consumption, and number of EV charging sessions.

Policy Review: This policy is reviewed annually to assess its effectiveness, incorporate new technologies, and align with evolving urban mobility plans and environmental regulations.

3.8. Green Building Policy

Objective: To ensure that all new constructions and major renovations at NIET adhere to recognized green building standards, promoting energy efficiency, water conservation, and sustainable material use.

Purpose: This policy aims to integrate sustainable design and construction practices into NIET's infrastructure development, reducing the environmental footprint of buildings throughout their lifecycle and enhancing occupant well-being.

Scope: This policy applies to all new building constructions, major renovations, and infrastructure development projects undertaken within the NIET campus.

Policy Provisions:

i. **Adherence to Green Building Standards:** All new constructions and major renovations shall follow Green Building standards in line with recognized national and international guidelines.
ii. **Sustainable Design Principles:** Buildings are designed with a focus on:
    a. **Natural Lighting and Ventilation:** Maximizing daylight penetration and cross-ventilation to reduce reliance on artificial lighting and air conditioning.
    b. **Thermal Insulation:** Use of insulated walls, roofs, and high-performance glazing to minimize heat gain/loss.
    c. **Solar Rooftops:** Integration of rooftop solar photovoltaic systems for on-site renewable energy generation.
    d. **Low-Flow Water Systems:** Installation of water-efficient fixtures (faucets, toilets, urinals) and greywater recycling for non-potable uses.
    e. **Sustainable Materials:** Prioritizing the use of locally sourced, recycled content, and materials with low embodied energy.
iii. **Green Building Audits:** NIET conducts green building audits periodically to ensure infrastructure aligns with environmental norms. The institute aims for relevant green building certifications for new projects.
iv. **Energy Neutrality in Design:** Encouraging and incorporating design strategies that aim for net-zero energy consumption in new buildings, where feasible.

v. **Waste Management during Construction:** Implementation of construction and demolition waste management plans to minimize waste generation and maximize recycling of construction debris.

Monitoring and Governance: The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC), oversees the implementation of this policy, ensuring adherence to design principles and certification requirements.

Policy Review: This policy is reviewed periodically to incorporate advancements in green building technologies, changes in regulatory frameworks, and lessons learned from completed projects.

4. Cross-Cutting Governance Structure

All environmental policies at NIET are governed by The **Institute Infrastructure Maintenance & Sustainability Committee (IIMSC),** which provides strategic oversight and coordination.

5. Policy Review and Compliance

This Institute Environment Policy will be reviewed annually by The Institute Infrastructure Maintenance & Sustainability Committee (IIMSC), in consultation with relevant committees and stakeholders. The review process will consider audit outcomes, technological advancements, regulatory changes, and feedback from the campus community. NIET is committed to ensuring full compliance with all applicable national, state, and local environmental laws and regulations.

6. Conclusion

NIET , Greater Noida, is dedicated to upholding the highest standards of environmental stewardship. Through the systematic implementation of this comprehensive Environment Policy, the Institute aims to create a sustainable, healthy, and inspiring campus environment that serves as a model for responsible environmental management and contributes to a greener future.

Director

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