

## OFFICE OF THE PRINCIPAL

# Maulana Azad College



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## **POLICY DOCUMENT ON ENVIRONMENT**

#### INTRODUCTION:

In the face of escalating environmental challenges, the need for comprehensive and proactive environmental management has never been more urgent. Effective environmental management is not only essential for the preservation of our natural resources but also for ensuring the sustainability and well-being of future generations. The Environment Policy of Maulana Azad College is a testament to our commitment to sustainable development and environmental stewardship. Recognizing the pressing challenges posed by climate change, resource depletion, and environmental degradation, the policy outlines a comprehensive framework for fostering an eco-friendly campus. Our focus on energy management, waste management, water conservation, and green campus initiatives reflects our dedication to creating a sustainable learning environment.

## The policy document emphasizes on four critical areas of focus:

- I. ENERGY MANAGEMENT AND USAGE: Energy management is a cornerstone of our policy aiming to reduce the college's carbon footprint through the adoption of renewable energy sources within the college campus and minimizing our reliance on non-renewable resources, emphasizing energy-efficient practices, and promoting energy conservation among students and staff.
- II. GREEN CAMPUS MANAGEMENT: Green campus management is integral to our environmental goals, focusing on increasing green cover, maintaining biodiversity, and promoting sustainable landscaping practices.
- III.WASTE MANAGEMENT: Effective waste management is equally prioritized, with an emphasis on reducing, reusing, and recycling waste, alongside responsible disposal practices that minimize environmental impact to ensure sustainable environment management.
- **IV. WATER MANAGEMENT**: Water conservation is critical in our strategy, given the growing scarcity of this vital resource. Our policy includes measures to optimize water use, prevent wastage, and implement rainwater harvesting and water recycling systems within college campus safeguarding this vital resource for all.

This policy serves as a blueprint for achieving environmental sustainability through coordinated and responsible actions by managing and mitigating environmental impacts across various sectors.



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## I - ENERGY MANAGEMENT AND USAGE

#### 1. Introduction:

- Follows WBREDA guidelines for energy management (link: <a href="https://www.wbreda.org/renewable-energy-policy-of-west-bengal/">https://www.wbreda.org/renewable-energy-policy-of-west-bengal/</a>).
- Electrical installations and maintenance managed by PWD, Government of West Bengal.

#### 2. Aim:

- Achieve a Five-Star rating from the Bureau of Energy Efficiency.
- · Reach Net-Zero carbon emissions by 2046.

## 3. Objectives:

- Reduce energy consumption through efficient practices and technologies.
- · Increase use of renewable energy sources on campus.
- Promote awareness and education on sustainable energy use.
- Comply with national and state energy regulations.

## 4. Energy Efficiency Measures:

- **Lighting:** Install LED lighting, use natural light, and implement motion sensors and automated controls.
- HVAC Systems: Upgrade to high-efficiency models, phase out old window ACs, and maintain systems regularly.
- **Appliances and Equipment:** Use Energy Star-certified or equivalent appliances and promote energy-saving settings.

## 5. Renewable Energy Integration:

- Solar Energy: Install solar panels and explore solar water heating systems.
- Other Renewables: Investigate wind, geothermal, and biomass energy sources.

## 6. Energy Conservation:

- Awareness Programs: Conduct workshops and campaigns on energy conservation.
- **Behavioral Changes:** Encourage turning off unused lights and equipment, and minimize use of personal heaters and coolers.
- Water Conservation: Promote efficient fixtures, rainwater harvesting, and awareness.
- **Energy Audits:** Perform regular audits to identify high consumption areas and potential savings.

## 7. Monitoring and Reporting:

- Annual Reporting: Publish annual energy reports detailing consumption and progress toward renewable goals.
- **Continuous Improvement:** Update the policy based on performance, technological advancements, and regulatory changes.



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## 8. Roles and Responsibilities:

- Energy Management Committee: Oversee policy implementation, energy audits, and projects.
- Facilities Management: Maintain energy infrastructure and implement measures.
- Faculty and Staff: Support energy initiatives and conservation practices.
- Students: Engage in energy conservation programs and adopt sustainable practices.
- College Administration: Supervise all energy management measures.

## 9. Compliance:

- Regulatory Adherence: Ensure compliance with energy regulations and guidelines.
- Sustainability Standards: Meet or exceed recognized sustainability certifications.

## **II - GREEN CAMPUS MANAGEMENT**

## 1. Introduction:

 Green campus policy based on Central Pollution Control Board's Pollution Control Acts ((link:https://cpcb.nic.in/7thEditionPollutionControlLawSeries2021.pdf).

#### 2. Aim:

• Achieve a plastic-free campus and balance carbon emissions for Net-Zero target by 2046.

## 3. Objectives:

- · Sustainable landscaping.
- · Resource conservation.
- Pollution prevention.
- · Biodiversity enhancement.
- Environmental education.
- Compliance with environmental regulations.

## 4. Energy Efficiency:

- Implement energy-saving measures (LED lighting, efficient appliances).
- Promote renewable energy sources (solar panels).
- · Conduct regular energy audits.

#### 5. Resource Conservation:

- Encourage water conservation and rainwater harvesting.
- Promote paper-saving initiatives and use of sustainable materials.

## 6. Waste Management:

- Segregate waste (recyclable, non-recyclable, organic, and hazardous).
- Establish recycling programs and composting facilities.
- Conduct waste audits and educational programs.

#### 7. Green Spaces and Biodiversity:

Enhance green spaces with native plants.



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- Nurture medicinal plants and create gardens, green roofs, urban forests.
- Support local wildlife and conservation projects.

## 8. Pollution Prevention:

- Allocate parking lots to reduce in-campus air pollution.
- Install air quality and noise monitoring systems.
- Implement Integrated Pest Management (IPM).
- Proper storage and disposal of chemicals.
- Promote digital communication to reduce paper usage.

## 9. Education and Awareness:

- Integrate sustainability into curriculum and research.
- Form green clubs and organize environmental workshops and campaigns.
- Encourage participation in sustainability programs.

## 10. Monitoring and Reporting:

- Regularly monitor sustainability progress.
- Conduct annual reviews of the Green Campus Policy.
- Engage with external organizations to enhance efforts.

## 11. Roles and Responsibilities:

- Green Campus Committee oversees policy implementation.
- Facilities Management ensures sustainable campus operations.
- Faculty, staff, and students incorporate sustainability into activities.
- College Administration supervises overall initiatives.

## 12. Special Commitment:

• NSS unit extends environmental practices to benefit the local community.

## **III- WASTE MANAGEMENT**

#### 1. Introduction:

- Alignment with Pollution Control Board of West Bengal (<a href="https://www.wbpcb.gov.in/waste-managment">https://www.wbpcb.gov.in/waste-managment</a> ) and Ministry of Environment guidelines (<a href="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php?id=aHdtZC9IV01fUnVsZXNfMjAxNi5wZGY="https://cpcb.nic.in/displaypdf.php."https://cpcb.nic.in/displaypdf.php.
- MOU with Garbage Free India for waste management, and contracts with Hulladek and Vital Waste has been done for proper disposal and recycling.

#### 2. Aim:

• Implement an AI-based waste management system to optimize waste processes for sustainability and efficiency.

#### 3. Objectives:

- · Comply with waste management regulations.
- Reduce waste through sustainable practices.



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- Ensure responsible waste segregation, collection, storage, and disposal.
- Promote recycling and reuse.
- Engage the college community in waste reduction initiatives.

## 4. Waste Segregation:

- General Waste: Non-recyclable, disposed of through municipal services.
- Recyclable Waste: Paper, plastics, metals, etc., placed in recycling bins.
- Organic Waste: Composted on-site or sent to composting facilities.
- Hazardous Waste: Handled according to specific guidelines.

## 5. Waste Collection and Storage:

- Clearly marked bins placed at strategic locations.
- Regular waste collection to maintain hygiene.
- Designated storage areas for recyclable and hazardous waste.

#### 6. Waste Disposal:

- General Waste: Collected by municipal services and sent to landfills.
- Recyclable Waste: Sent to Vital Waste and Hulladek for processing.
- Organic Waste: Composted on-site or sent to composting facilities.
- Hazardous Waste: Managed and disposed of in compliance with regulations.

## 7. Recycling and Reuse:

- Promote reuse of materials through awareness campaigns.
- Establish a recycling program in collaboration with waste management partners.
- Encourage reuse of refurbished materials for eco-friendly purposes.
- Install organic waste composting and leaf composting facilities with AI sensors.
- Conduct workshops on waste reduction and recycling.

## 8. Awareness and Education:

- Organize seminars, workshops, and campaigns on waste management.
- Disseminate information on waste practices through various channels.
- Encourage student involvement in waste management initiatives.

## 9. Compliance and Monitoring:

- Conduct regular audits to ensure compliance with waste management practices.
- Waste Management Committee to monitor activities and implement corrective actions.
- Periodic review of compliance with Pollution Control Board guidelines.

## 10. Roles and Responsibilities:

- Waste Management Committee: Oversee policy implementation and audits.
- Facilities Management: Handle waste collection, storage, and disposal.
- Faculty and Staff: Participate in waste reduction and educate students.
- Students: Follow waste segregation guidelines and support initiatives.
- College Administration: Supervise overall waste management measures.



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## **IV- WATER MANAGEMENT**

#### 1. Introduction:

- Commitment to sustainable water use and conservation.
- Approach based on National Water Policy guidelines
   (<a href="https://nwm.gov.in/sites/default/files/national%20water%20policy%202012\_0.pdf">https://nwm.gov.in/sites/default/files/national%20water%20policy%202012\_0.pdf</a>) and "Jal Dharo Jal Bharo" Scheme of Government of West Bengal (<a href="https://www.wbwridd.gov.in/jal dharo">https://www.wbwridd.gov.in/jal dharo</a> jal bharo).

#### 2. Aim:

 Implement comprehensive water management practices focusing on conservation, reducing wastage, and promoting sustainability.

## 3. Objectives:

- Implement rainwater harvesting and recycling.
- Install auto-cut pumps to reduce wastage.
- Construct and maintain rainwater storage tanks.
- Promote water conservation through campaigns.
- · Maintain overhead water reservoirs.
- · Install sensor-based faucets.

## 4. Water Conservation Measures:

- Rainwater Harvesting and Recycling: Systems to capture and reuse rainwater for irrigation, flushing, and gardening.
- **Auto-Cut Pumps:** Prevent water overflow and leakage by stopping pumps when tanks are full.
- Rainwater Storage Tanks: Collect and store rainwater for use during dry periods.
- Awareness Campaigns: Posters and campaigns to encourage water conservation.
- Overhead Reservoirs: Maintain and optimize use to ensure reliable supply.
- Sensor-Based Faucets: Install in restrooms to minimize water use.

## 5. Awareness and Education:

- Integrate water conservation into the academic curriculum.
- · Conduct workshops, seminars, and campaigns.
- Engage students and staff in water-saving practices.
- Use digital media for information dissemination.

## 6. Monitoring and Reporting:

- Monitor water usage and identify areas for improvement.
- Regularly check faucets and pipes for leaks.
- Publish an annual water management report.
- Review and update the water management policy.

## 7. Roles and Responsibilities:

 Water Management Committee: Oversee policy implementation and conduct audits.



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- Facilities Management: Maintain water infrastructure and implement conservation measures.
- Faculty and Staff: Support and incorporate water-saving practices.
- Students: Participate in conservation programs.
- College Administration: Supervise all conservation measures.
- 8. Compliance:
- Adhere to national and state water regulations.
- Strive to meet or exceed sustainability standards.

#### INFERENCE:

Maulana Azad College is committed to sustainability and environmental responsibility, aiming to create a green campus through various initiatives. The college is dedicated to managing energy resources sustainably, reducing its carbon footprint, and promoting renewable energy use. It also focuses on effective waste management practices to contribute to a sustainable future and comply with pollution control standards. Furthermore, the college strives to manage water resources responsibly, reducing its water footprint and fostering a culture of conservation. By implementing these measures, Maulana Azad College sets an example for sustainable practices in higher education and contributes positively to the environment.

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