

GREEN CAMPUS POLICY

VERSION 1.0



GAUHATI UNIVERSITY
NAAC 'A' GRADE INSTITUTION



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Overview

Gauhati University's Green Campus Policy aims to promote environmental sustainability and reduce the institution's ecological footprint. This policy encompasses initiatives to conserve energy, promote waste reduction and recycling, preserve biodiversity, and encourage sustainable transportation practices. Additionally, the policy emphasizes the importance of environmental education and awareness among students, faculty, and staff to foster a culture of sustainability within the university community.

- ✓ To frame a comprehensive 'Green Campus Policy' for Gauhati University, the following key points are considered:
- ✓ To acknowledge that university activities and resource usage have a significant impact on the environment, encompassing physical, economic, and social dimensions.
- ✓ To identify key focus areas such as conservation of natural resources, waste reduction, carbon footprint reduction, water conservation, and promotion of renewable energy.
- ✓ To affirm the university's commitment to environmental sustainability by engaging faculty, students, and staff in impactful sustainability initiatives.
- ✓ To emphasize the university's role as a leader in promoting sustainable practices and fostering a culture of growth and development.
- ✓ To establish a clear vision for developing a 'Green Campus' that prioritizes environmental protection and sustainability.
- ✓ To outline the overarching principles and objectives of the 'Green Campus Policy', emphasizing continual improvement and compliance with national environmental mandates and guidelines.
- ✓ To define strategies and mechanisms for implementing the policy, including the development of environmental policies, adoption of safe operational practices, and promotion of sustainable initiatives.
- ✓ To ensure compliance with relevant government regulations and guidelines while implementing the policy. Establish mechanisms for monitoring and evaluating the effectiveness of sustainability initiatives.

- ✓ To promote education and awareness among the university community regarding environmental issues and the importance of sustainable practices.
- ✓ To encourage partnerships and collaboration with government agencies, non-profit organizations, and industry stakeholders to enhance the university's sustainability efforts.
- ✓ To commit to continuous improvement by regularly reviewing and updating the 'Green Campus Policy' in response to changing environmental conditions and emerging best practices.

By incorporating these elements into the 'Green Campus Policy', Gauhati University can demonstrate its commitment to environmental sustainability and contribute to creating a greener, more sustainable campus environment.

Aim and Objectives

Gauhati University Delhi-NCR aspires to elevate its standards as a 'Green Campus' by embracing green technologies and implementing best practices, guided by the following key aims and objectives:

- 1. Promoting Environmental Awareness:** Foster awareness among all university stakeholders regarding environmental issues, resource utilization, and sustainability, thereby cultivating a holistic understanding of environmental protection.
- 2. Showcasing Institutional Green Initiative:** Demonstrate the university's commitment to environmental sustainability through the implementation of green initiatives and practices. This involves ongoing education and training initiatives to ensure continuous improvement in sustainable practices across the institution.
- 3. Promoting Environmental Education and Awareness:** Establish a platform for students, faculty, and staff to deepen their understanding of biodiversity, environmental sustainability, best practices through case studies, green waste management systems, conservation of natural resources, and renewable energy

sources. This will be achieved through research, relevant curriculum programs, and field visits, encouraging individual actions and initiatives.

- 4. Research for Sustainable Practices:** Undertake research aimed at developing sustainable practices and actions to foster clean and healthy surroundings within the university environment.
- 5. Fostering Collaborative Partnership:** Foster collaborative partnerships with relevant stakeholders, including government organizations, industries, civil society organizations, NGOs, and academic institutions. These partnerships will work towards enhancing policy understanding and implementing Green Campus initiatives to strengthen the organization's capacity.
- 6. Regular Environmental Audits:** Conduct periodic environmental audits across all SRMU campuses to identify areas for improvement and ensure long-term sustainability.
- 7. Engagement in National Events and Initiatives:** Organize and actively participate in national events, workshops, seminars, and conferences dedicated to promoting environmental sustainability and sharing best practices for maintaining a clean and green campus.
- 8. Integration of Sustainability in Decision Making:** Develop an integrated sustainability action plan for SRMU, prioritizing sustainability as a core aspect of the university's decision-making processes.
- 9. Adherence to Environmental Standards:** Ensure that all university activities align with applicable environmental standards, regulations, and guidelines at both national and international levels, promoting environmental responsibility and accountability.

Policy Statement

The current policy aims to develop strategies for establishing a sustainable green campus and to encourage the analysis of environmental sustainability that is applicable to regional and global contexts, thereby promoting sustainable and equitable development. Gauhati University will actively promote a culture of green campus through environmental sustainability initiatives and best practices across its affiliated institutes. The mission of this policy is to integrate all aspects of

environmental responsibility into policies, programs, and practices, thereby fostering the development of projects that enhance the sustainability of both the educational and physical landscapes.

Activities

The Green Campus activities at Gauhati University will focus on various aspects of sustainable development, including education and capacity building, research, campaigns and awareness, biodiversity documentation and resource use, as well as the development of best practices.

Education and capacity building

Gauhati University will enhance expertise in environmental sustainability by offering integrated education programs and niche-oriented certification programs tailored to meet the needs of students and professionals, thereby building their capacity in this area.

Curricula

1. Gauhati University aims to enhance and expand the environmental content within the curricula offered at its constituent institutes.
2. This includes developing curriculum modules for both undergraduate and postgraduate students, with a focus on addressing emerging issues related to environmental sustainability.
3. Additionally, efforts will be made to raise awareness among students and faculty members regarding the environmental aspects incorporated into their courses.
4. Eminent researchers, industrialists, and sustainability experts will be invited to campuses to deliver guest lectures and share their insights.
5. Furthermore, niche-based programs will be designed and implemented to foster a stronger academic-industry interface.

Green Initiatives

Gauhati University aims to foster a culture of environmental responsibility and sustainability that extends beyond the confines of the classroom. The initiative seeks to instill in students, faculty, and staff a sense of duty and long-term dedication to conserving and protecting the environment, whether at home, on campus, or within the broader community. At the heart of this endeavor is a strategic plan that serves as a guiding framework for all stakeholders. This plan identifies areas of resource management where current practices are not environmentally or economically sustainable. In these areas, community members will collaborate to implement more eco-friendly alternatives. The campus environmental initiative also aims to raise awareness among all stakeholders about the importance of adopting local and low-impact living and operational practices to promote sustainability. Periodic environmental audits will be conducted to assess the progress of the initiative in achieving its objectives and commitments.

The policy promotes green initiatives and pledges to prioritize various aspects, encompassing, but not restricted to:

1. Establishing Green-Campus Committees at various levels of university administration, involving staff, students, and the local community, to oversee and monitor green initiatives and their impact on campus.
2. Raising awareness about biodiversity conservation and protection through group discussions, field trips, and nature interpretation centers.
3. Organizing events on significant environmental days to advocate for environmental sustainability.
4. Enhancing green coverage by planting trees in local habitats using ecologically sound methods and practices. Advocating for a plastic-free campus through initiatives like plastic collection drives and reducing the use of disposable plastic through awareness campaigns.
5. Cultivating a zero-waste culture on campus by integrating waste reduction into the curriculum and campus activities, empowering members of the campus community to become leaders in zero waste practices.

6. Providing educational opportunities to study campus and local environmental issues as part of the curriculum.
7. Improving sanitation and hygiene by providing sustainable tools and resources.
8. Implementing waste management strategies to reduce campus waste generation and manage waste through on-site processing systems such as composting, biogas production, and recycling.
9. Managing water and other natural resources through initiatives like rainwater harvesting, recharge pits, and reducing paper usage, as well as sourcing regional and organic food.
10. Conserving energy by maximizing energy efficiency, utilizing sustainable energy sources, and employing energy-efficient equipment.
11. Incorporating sustainability into land-use and building planning.
12. Encouraging alternative transportation methods such as cycling, electric vehicles, and establishing vehicle-free zones on campus.
13. Promoting environmentally and socially responsible development and investment practices.
14. Creating environmentally friendly physical infrastructure, institutional practices, and personal behaviors to promote public health and well-being.
15. Promoting and implementing best practices for green public outreach through community engagement initiatives.

Research Activities

The policy encourages collaboration between faculty and students in research related to green campus sustainability at the University levels, fostering connections with sustainability initiatives in areas such as water, energy, waste management, biodiversity, land use, and transportation. This commitment to interdisciplinary research in environmental sustainability is demonstrated through:

1. Encouraging students to engage in environment-related research both on campus and in local communities and industries.
2. Facilitating interdisciplinary research among faculty members by providing necessary research infrastructure relevant to environmental, management, and societal issues.
3. Conducting environmental audits to identify potential research areas for improving the efficiency of green campus initiatives.
4. Ensuring that research conducted at SRMU adheres to sustainable practices and meets ethical and environmental standards.
5. Establishing guidelines for research projects that may have an impact on the environment and society.
6. Organizing conferences, seminars, workshops, and symposia at the regional, national, or international level to create a platform for faculty, students, researchers, and civil society networks to share ideas and exchange knowledge derived from their research endeavors.

Promotional Initiatives and Consciousness-Raising

As an integral component of advancing the Green Campus and Sustainability vision, Gauhati University endeavors to foster and execute environment-focused campaigns and awareness initiatives across all its constituent institutes. These efforts entail:

- i. Engaging staff, faculty, and students in organizing camps, seminars, workshops, drives, and rallies to communicate environmental concerns and issues, bridging the gap between classroom learning and practical field action.
- ii. Engaging with local communities and industries through a participatory approach.

- iii. Developing academic-industry focused campaigns addressing current interests and needs.

Utilization of resources

Measuring the utilization of natural resources is essential to assess the efficiency of their usage. The policy aims to conduct regular evaluations of resource utilization at Gauhati University to gauge its environmental impact concerning vital resources such as water, energy, biodiversity, land use, buildings, solid waste, etc.

A. Water

Each campus location will formulate a sustainable water management plan tailored to its specific characteristics, which will encompass the following activities:

- i. Identifying the different types of water systems in use, including potable water, non-potable water, Laboratory water, sterilized water, reclaimed water, storm water, and wastewater.
- ii. Developing strategies for water conservation and efficiency that consider local ecological factors, regional conditions, and regulatory requirements.
- iii. Monitoring and reporting water usage at each campus location systematically through metered utilization and implementing leak detection programs.
- iv. Implementing location-specific strategies to reduce potable water consumption and explore opportunities for reusing treated water.
- v. Encouraging the adoption of innovative water-efficient technologies during capital projects and renovations, such as water-efficient fixtures and appliances, rainwater harvesting, and watershed restoration.
- vi. Assessing the indirect costs and savings associated with reduced energy consumption due to water use.
- vii. Managing storm water comprehensively from a watershed perspective to protect and restore the local watershed's integrity.
- viii. Developing best practices for preventing storm water pollution from various activities, such as construction, trenching, outdoor equipment storage, landscaping maintenance, and vehicle parking.

- ix. Identifying opportunities for new and innovative practices in water use and management.
- x. Adhering to responsible ethics and practices to minimize wastewater generation and promote water recycling through planned initiatives.
- xi. Conducting studies on alternative methods and techniques for water conservation and recycling.

B. Energy

Gauhati University is committed to establishing a sustainable energy framework by implementing energy conservation and efficiency measures across all campuses. These efforts will focus on reducing the consumption of non-renewable energy through a combination of energy efficiency projects, the integration of local renewable energy sources into existing and new facilities, purchasing renewable energy from the grid, and other energy-saving initiatives to positively impact the environment. In alignment with the university's Energy Policy, the following approach will be adopted:

- i. Raising awareness among students, faculty members, and stakeholders about the importance of energy efficiency, reducing electricity consumption on campuses, and encouraging energy conservation in operational activities.
- ii. Encouraging student-led projects and research on energy conservation and optimizing energy utility systems.
- iii. Implementing energy audits and monitoring energy usage across all campuses to track progress and identify areas for improvement.
- iv. Establishing mechanisms for generating power from renewable energy sources at all campus locations to the fullest extent feasible.
- v. Retrofitting appliances and technologies across all campus infrastructures to enhance energy efficiency, with a focus on long-term energy consumption reduction in alignment with the university's growth trajectory.

- vi. Employing a data-driven approach to prioritize energy-saving measures based on technology, costs, and internal capacity, ensuring an optimal mix of strategies within the overall infrastructure development framework.
- vii. Developing a comprehensive long-term plan to integrate sustainable energy projects, including the installation of renewable energy-based power systems wherever viable.
- viii. Crafting a strategic action plan for implementing energy efficiency measures across all campus-related infrastructures and facilities.



C. Waste Management

As part of its comprehensive approach outlined in the Green Campus Policy, Waste Management Policy, Environmental Sustainability Policy, and Energy Policy, Gauhati University is committed to implementing a holistic strategy for managing waste and related issues across its campus locations to ensure sustainable practices. This policy encompasses various forms of waste generated within campus premises, including but not limited to wet waste, solid waste, recyclable materials, biomedical waste, hazardous waste, e-waste, and wastewater. Gauhati University will undertake the following initiatives:

- i. Foster a culture of waste minimization and promote advocacy for the principles of reduce, reuse, and recycle (3Rs) throughout the campuses.
- ii. Develop a comprehensive policy framework and action plan to address the management of all types of waste generated on campus and optimize resource utilization.
- iii. Optimize resource utilization to minimize waste generation and promote recycling and reuse practices across all campus facilities.
- iv. Implement initiatives to transition towards a paperless work environment across the campus, aiming to reduce environmental impact and enhance overall operational efficiency.
- v. Establish demonstrative models for the deployment of on-site waste processing and recycling technologies/systems, enabling the recovery of resources and useful products from various types of waste.
- vi. Drive innovation in waste management technologies and enhance existing systems through research efforts geared towards sustainable development of the Green Campus. Develop advocacy programs involving communities and stakeholders to promote awareness and adoption of sustainable waste management practices.
- vii. Formulate an integrated waste management policy and action plan in collaboration with all relevant stakeholders, including students, policymakers, NGOs, urban local bodies, academic institutions, industries, and other agencies. Align the policy with the guidelines provided by the Government of

India for the establishment of a "Swachh Campus," which constitutes an integral component of Green Campus development.

Biodiversity, land use, and construction of buildings

As a health-promoting institution in India, Gauhati University has an ongoing commitment to enhance and protect the biodiversity landscape on its campus and at its constituent institutes, as well as to develop sustainable infrastructure systems. Gauhati University will strive to create, maintain, and strengthen the current proportion of green spaces on its campus by addressing the following:

Biodiversity

- i. Establishing a Biodiversity Cell tasked with overseeing programs and projects related to biodiversity activities.
- ii. Creating a habitat map for the campus or specific areas within the campus.
- iii. Conducting an inventory and status survey of flora and fauna diversity across all campuses, with a focus on identifying threatened and endangered species.
- iv. Developing a biodiversity action plan aimed at protecting indigenous habitats and key species.
- v. Exploring ground management methodologies, including the use of herbicides, pesticides, fertilizers, and irrigation water.
- vi. Implementing afforestation, plantation, and maintenance of appropriate trees, shrubs, and indigenous vegetation using ecologically sound practices.
- vii. Assessing the risk of introducing invasive species and implementing preventive or management measures.
- viii. Adhering to environmentally friendly practices in maintaining existing landscapes and vegetation.
- ix. Conducting awareness campaigns for faculty, students, and staff through nature walks and biodiversity surveys.

- x. Establishing Butterfly Gardens on campus to raise awareness and sensitivity among students and faculty regarding ecology and the environment.
- xi. Establishing a Nature Interpretation Center to educate all stakeholders, including visitors, about the importance of ecology and the environment, equipped with appropriate signage, dioramas, exhibits, books, and periodicals.
- xii. Implementing suitable strategies for managing domesticated animals, including stray dogs.
- xiii. Utilizing a Citizen Science platform involving security guards, garden staff, and housekeeping staff for regular documentation of campus biodiversity.
- xiii. Holding University Biodiversity Committee meetings to discuss and review implemented actions related to the above initiatives.

Building Design

- i. All the new infrastructure projects, including academic blocks, hostel facilities, and residential areas for employees, will be designed, constructed, and operationalized in accordance with the latest sustainable building design principles, materials, and technologies, with a particular focus on environmental conservation and protection.
- ii. Gauhati University will actively pursue green building certification for its campuses as well as adhering to ISO standards wherever feasible within the university's requirements and budget constraints.
- iii. Gauhati University will establish internal quality management systems to integrate sustainability practices, aiming for long-term campus sustainability certification.

Building Renovation

All upgrades to campus infrastructure will prioritize the utilization of suitable sustainable technologies for fixtures, mechanical, electrical, and plumbing systems, as well as landscaping, adhering to the recognized standards set forth by the Indian Green Building Council (IGBC).

Sustainable Transportation and Travel

Gauhati University aims to enact a sustainable transportation and travel policy, employing a blend of suitable fleet management practices and commuter travel strategies, including:

- i. Developing and executing a comprehensive, long-term strategy to diminish energy-associated greenhouse gas emissions from academic travel, while supporting staff members in opting for low-carbon travel alternatives.
- ii. Conducting an inventory of campus-specific travel-related greenhouse gas emissions, utilizing suitable methodologies to assess emissions from car, bus, and air travel.
- iii. Ensure responsible usage of vehicles (such as buses, cars, and two-wheelers) through regular maintenance and the adoption of sustainable fuels to promote energy-efficient travel.
- iv. Develop targets for reducing emissions from transportation, including defining emission reduction goals for different types of fleets, commuting methods, and employee travel, and provide annual progress reports on achieving these targets.
- v. Implement cost-effective measures, including the use of clean and energy-efficient vehicles, bicycles, and the adoption of alternative fuels wherever feasible, to promote sustainability in transportation.
- vi. Utilize data on campus travel emissions to raise awareness among students, faculty, and staff.
- vii. Monitor campus-wide GHG emissions related to transportation and set targets for reducing these emissions.
- viii. Prioritize and organize meetings and discussions through telephone or video conferences whenever possible to minimize physical travel (by air, train, bus, etc.).

- ix. Encourage and promote a culture of low-carbon transportation to encourage conscious travel decisions and sensitize all stakeholders to implement sustainable practices.
- x. Develop emission reduction goals for transportation at each campus location, including identifying different fleet categories, commuting methods, and employee travel, and provide annual progress reports on achieving these goals.
- xi. Implement cost-effective measures at all campus locations, including the use of clean and energy-efficient vehicles, and where feasible, adopt alternative fuels and other sustainability measures.
- xii. Facilitate the development of programs and projects aimed at reducing potential environmental impacts from commuting. Conduct appropriate advocacy and awareness campaigns at all campus locations to sensitize students, employees, and support staff to improve route usage and adopt suitable patterns for using private vehicles.
- xiii. Conduct a cost-benefit analysis for any proposed transport fleet management services, where feasible.

Green Campus Policy Benefits

The Green Campus Policy envisions Gauhati University strongly supporting its implementation through:

Institutional Benefits:

- i. Facilitation of a platform for University management, academic/research staff, and students to convene and collaborate on shared interests.
- ii. Cultivation of a harmonious campus community.
- iii. Empowerment of the University community.
- iv. Encouragement and facilitation of innovation and adaptability.
- v. Mitigation and reduction of adverse environmental impacts.

- vi. Enhancement of branding, promotion, and recognition as a Sustainable University.

Local Community Benefits:

- i. Establishment of a model for environmental adaptability within the local community.
- ii. Engagement of local community members, leaders, and organizations in expanding outreach activities.
- iii. Exchange of experiences and dissemination of best practices.
- iv. Improvement in health, sanitation, and waste management within the local community.

Policy Responsibilities and Steps of Green Campus Program

- i. Gauhati University will form a Green Campus Committee tasked with overseeing the implementation of this policy. Comprising representatives from the campus community, the committee will guide and coordinate campus involvement in the program.
- ii. The Committee will conduct a comprehensive campus assessment from environmental and Green Campus perspectives to identify areas for improvement.
- iii. The University will devise an action plan based on the inputs of the Green Campus Committee, outlining achievable targets with specified completion dates and assigned responsibilities.
- iv. Gauhati University will establish effective mechanisms for monitoring and evaluating the Green Campus program, ensuring that progress towards targets is regularly assessed and adjustments are made as needed.
- v. Gauhati University will integrate Green Campus activities and programs into the educational curriculum on campus.

- vi. Gauhati University will communicate its Green Campus initiatives to the broader community through various means such as publicity campaigns, awareness-raising efforts, and targeted outreach programs.
- vii. Gauhati University will develop a guidance document outlining best practices for managing a 'Green Campus,' serving as a Green Charter for the institution.

Review of Policy

The Policy will undergo a review process once every five years or sooner if necessary due to urgent circumstances. The purpose of this review will be twofold:

- (i) to assess the effectiveness of implementing sustainable 'Green Campus' practices at Gauhati University, and
- (ii) to evaluate the infrastructure developed for supporting the implementation, provisions, and operations, including resource usage, building infrastructure, transportation, service utilization, and compliance with local, national, and international regulations and standards. During this review, Gauhati University will actively engage its stakeholders, including students, faculty, administrators, staff, and external organizations, to ensure their participation and input in refining and enhancing the policy implementation.

Compliance

All Deans, Registrar, Directors, and individuals in positions of responsibility will be responsible for implementing the policy guidelines outlined above. The Internal Quality Assurance Cell (IQAC) of Gauhati University may oversee and facilitate the conduct of annual sustainability audits across campuses to ensure adherence to the policy.



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16/8/2023

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