

DES's Kirti M. Doongursee College

Green Campus Policy

Context:

Kirti College is dedicated to upholding and advancing stringent environmental standards across all facets of its operations, spanning teaching, research, and community engagement. Renowned for its unwavering commitment to ecological consciousness, the college has garnered a distinguished reputation as a responsible institution deeply attuned to environmental concerns.

A hallmark of our environmental stewardship lies in our lush biodiversity, characterized by verdant vegetation and thriving fauna. Our meticulously maintained herbal and plant gardens stand as a testament to our unwavering dedication to upholding elevated environmental standards. This vibrant ecosystem not only enhances the aesthetic appeal of our campus but also serves as a living embodiment of our enduring commitment to environmental preservation.

Through our academic endeavors, research initiatives, and community outreach programs, Kirti College continuously strives to exemplify environmental leadership and inspire positive change. By fostering a culture of sustainability and ecological mindfulness, we endeavor to instill in our students and stakeholders a profound appreciation for the natural world and a steadfast commitment to its preservation.

As we navigate the complexities of the modern world, Kirti College remains steadfast in its resolve to serve as a beacon of environmental responsibility, championing the cause of sustainability, and setting a precedent for excellence in environmental stewardship.

Purpose:

The Environmental and Energy Policies of our college are crafted with the overarching goal of minimizing the environmental footprint of our operations while maximizing the sustainable utilization of available resources. This policy statement encapsulates our commitment to environmental stewardship and outlines our strategies to inspire and implement sustainable practices within our community and beyond.

At the heart of this policy is our vision to foster a culture of environmental responsibility and resource efficiency. We recognize the interconnectedness of our actions with the health of our planet, and thus, we are dedicated to pursuing best practices that mitigate environmental impacts and promote long-term sustainability.

Key components of our policy include:

1. **Visionary Approach:** Our policy sets forth a vision for environmental excellence, emphasizing the importance of proactive measures to address current and future environmental challenges.
2. **Priority Areas:** We prioritize areas such as energy conservation, waste reduction, water management, biodiversity preservation, and air quality improvement in our environmental plans and initiatives.

3. **Implementation Strategies:** The policy delineates clear strategies for implementing environmental plans, including the adoption of energy-efficient technologies, waste reduction programs, sustainable landscaping practices, and pollution prevention measures.
4. **Management and Evaluation:** We are committed to rigorous management and evaluation of our environmental efforts, regularly assessing progress, identifying opportunities for improvement, and adjusting strategies as needed to achieve our sustainability goals.
5. **Communication and Engagement:** This policy serves as a communication tool to disseminate our environmental goals and objectives to all members of the college community, including employees, students, and staff. It also fosters engagement and collaboration among stakeholders, empowering everyone to contribute to a healthier environment.

Ultimately, our environmental and energy policies aim to create a better, more sustainable future for current and future generations. By embracing these principles and working together as a community, we can make meaningful strides towards environmental stewardship and resource conservation.

Scope:

The scope of our policy document extends far beyond mere compliance; it serves as a comprehensive framework for integrating efficiency and environmental consciousness into every aspect of our daily activities. By delineating our duties and dedication to natural resource conservation and utilization, this document empowers us to cultivate a culture of sustainability that permeates throughout our college community.

Kirti College has proactively addressed the imperative of sustainability by weaving it into both curricular and extra-curricular activities. We recognize that sustainability is not merely a theoretical concept but a practical imperative that must be ingrained in our educational pursuits and extracurricular engagements. As such, we wholeheartedly welcome suggestions and foster an environment conducive to the exchange of ideas, recognizing that collaboration and innovation are key to fostering a risk-averse, resilient, and sustainable society.

Our college is poised to take the lead in developing new frameworks for understanding sustainable development, leveraging the expertise and ingenuity of our faculty, students, and stakeholders. We embrace the opportunity to explore novel approaches and methodologies that can translate our sustainability aspirations into tangible action.

By enacting and implementing this innovative policy, Kirti College is poised to enhance its standing as an attractive institution for study, research, sponsorship, and collaboration. Through our commitment to sustainability, we seek to not only inspire positive change within our own institution but also to serve as a model for other educational institutions seeking to embrace sustainability as a core value.

In summary, the scope of our policy document extends beyond the confines of our college campus, encompassing a vision for a more sustainable future that transcends boundaries and inspires collective action. Together, we are poised to embark on a journey towards a more sustainable and resilient society, and Kirti College is proud to lead the way.

PRINCIPLES AND OBJECTIVES:

Environmental Initiatives at Kirti College:

1. Committees and Clubs:

- **Green-club:** Engages students in eco-friendly activities, awareness campaigns, and initiatives to promote sustainability on campus.
- **Other Clubs/Committees:** Various clubs and committees actively work towards promoting sustainable practices in different aspects of college life.

2. Annual Green Audit:

- Conducted as per the criteria of NAAC, the college undertakes a mandatory annual green audit to assess its environmental performance and identify areas for improvement.

3. Promoting Awareness:

- **Academic Outreach:** Integrates discussions on climate change and environmental issues into the curriculum across disciplines, ensuring that all students receive education on sustainability.
- **Non-Academic Outreach:** Organizes awareness campaigns, workshops, seminars, and events to educate students about the challenges of climate change and the importance of sustainable living.
- **Stakeholder Engagement:** Involves various stakeholders of the college, including students, faculty, staff, and local community members, in environmental initiatives to broaden outreach and foster a culture of sustainability beyond the campus boundaries.

These initiatives collectively reflect Kirti College's commitment to environmental conservation and sustainability, fostering a campus environment where eco-consciousness is integrated into all aspects of academic and extracurricular life. Through proactive measures and community engagement, the college strives to inspire and empower future generations to become stewards of the environment.

Kirti College shall pursue following objectives:

- Use the semester long course-curriculum to promote education for the multidisciplinary nature of environment and sustainable development.
- The College will attempt to train its personnel and develop knowledge of environmental issues and the environmental effects of its activities among academic staff, students, and other users.
- The college's respective committees will formally monitor the work done on sustainability projects/initiatives, measure their progress, and report on their accomplishments.

- The College will continue to comply with environmental legislation in order to reduce its environmental effect by pursuing a number of goals, including plantation, water management, energy conservation, solid waste management, air quality management, and carbon footprint reduction.
- Develop and maintain an ISO: 14001 environmental management systems as well as an ISO: 50001 energy management system.
- Actively collaborate with local groups in the areas of environment, energy efficiency, and sustainable development by engaging in communication with government agencies, municipal corporations, and affiliating colleges.
- Promote environmental assessment initiatives.
- Raise awareness about keeping the campus clean and green.
- Establish sustainable practices on campus and among stakeholders.
- Ensure the long-term viability and environmental protection of the organisation.
- Take initiatives that are friendly (clean fuel, renewable resources etc.)
- Reduction in resource consumption
- Financial savings via reducing resource use.
- Practical experience which enriches the curriculum
- Improving/updating the institution's profile
- Instilling in young people an environmental ethic and value system
- Conduct audits to identify areas for improvement and make recommendations.
- Teach sustainable development to students from all disciplines.
- Promote sustainable development research and knowledge dissemination,
- Green campuses and support local sustainability efforts, and
- Engage and share information with worldwide networks
- Implement carbon-neutral policies.
- Increased environmental promotional events on campus to raise awareness.
- Establishment of an environment/green committee to oversee eco-friendly projects on campus and in the surrounding area.
- Introduce innovative technologies to make efficient use of energy resources.
- Use of renewable energy sources.
- Optimize your energy usage and costs.
- Reduce, Reuse, and Recycle are the three R's.
- Conduct internal energy audits on a regular basis to find energy-saving options.
- The Institution Energy Audit/Management Cell manages regular monitoring and follow-up procedures to ensure effective implementation at department levels.
- To make the Institute a role model in the area of energy conservation, train teachers, non-teaching staff, students, and housekeeping staff.
- Encourage your faculty members to become Certified Energy Auditors and Managers.
- Establish relationships with businesses and conduct a comprehensive energy audit.
- Encourage people from all walks of life to be aware of the importance of energy conservation.
- Review the Policy at least once a year.

The college's environmental policy will be pursued through the following priority areas:

1. Air Quality:

a. Monitoring and Assessment:

- Regularly monitor indoor and outdoor air quality using appropriate instruments and methodologies.
- Establish baseline measurements and set targets for air quality improvement.
- Analyze data to identify sources of pollution and areas for improvement.

b. Emissions Reduction:

- Develop and implement policies to reduce emissions from transportation, including promoting carpooling, cycling, and the use of public transportation.
- Encourage the adoption of low-emission vehicles and alternative fuels.
- Implement measures to reduce emissions from stationary sources such as power plants and heating systems, including the use of cleaner fuels and technologies.

c. Clean Energy Promotion:

- Increase the use of clean energy sources such as solar, wind, and geothermal power on campus.
- Invest in energy-efficient technologies and infrastructure to reduce energy consumption and associated emissions.
- Collaborate with local utilities and government agencies to access renewable energy incentives and programs.

d. Smoking-Free Zones:

- Smoking Free Campus: The College prohibits smoking and the use of other tobacco products in accordance with the framework given by the National Tobacco Control Programme (NTCP) 2007-2008. The college's anti-smoking committee guarantees that the anti-smoking policy is followed.
- Designate smoking-free zones on campus to protect the health and well-being of students, faculty, staff, and visitors.
- Provide smoking cessation resources and support to individuals who wish to quit smoking.
- Enforce smoking bans through signage, education, and community engagement efforts.

e. Other:

- Maintain good green cover to enhance CO₂ sequestration from campus.
- No vehicle day in a month to be initiated.
- To reduce dust, open places with lawn and grass should be used.
- Clean Air Initiatives: Our students and employees are encouraged to take public transportation. We promote carpooling to college to reduce pollution while also increasing social engagement. Automobile access is restricted on campus to discourage the usage of personal vehicles. The College will take steps to reduce the negative consequences of its traffic on the environment. All faculty, staff, and students will be encouraged to walk, ride bicycles, or take public transportation to and from the college, as well as between its campuses and outdoors the campus, and will be discouraged from using single occupancy private vehicles.

2. Biodiversity:

a. Green Space Preservation:

- Identify and protect natural areas and green spaces on campus to support biodiversity.
- Develop and implement conservation plans for sensitive habitats and species.
- Minimize habitat fragmentation and degradation through thoughtful land use planning and development practices.

b. Sustainable Landscaping:

- Adopt landscaping practices that promote biodiversity, such as planting native species and creating wildlife-friendly habitats.
- Reduce the use of chemical pesticides and herbicides in favor of organic and integrated pest management approaches.
- Implement sustainable landscaping techniques such as xeriscaping and rain gardens to conserve water and support ecosystem health.

c. Education and Outreach:

- Raise awareness about the importance of biodiversity conservation through educational programs, workshops, and events.
- Engage students, faculty, staff, and the local community in citizen science initiatives and biodiversity monitoring projects.
- Foster a sense of stewardship and connection to nature through hands-on learning experiences and outdoor activities.

d. Collaboration and Partnerships:

- Collaborate with local conservation organizations, government agencies, and community groups to leverage resources and expertise in biodiversity conservation.
- Participate in regional conservation initiatives and networks to exchange knowledge and best practices.
- Engage stakeholders in the development of biodiversity action plans and strategies for campus sustainability.

3. Energy:

a. Energy Efficiency:

- Set energy efficiency targets for campus buildings, facilities, and operations.
- Conduct energy audits to identify opportunities for improvement and prioritize energy-saving measures.
- Invest in energy-efficient technologies and upgrades, such as LED lighting, smart thermostats, and building automation systems.

b. Renewable Energy Integration:

- Increase the use of renewable energy sources such as solar photovoltaics, wind turbines, and biomass energy.
- Install renewable energy systems on campus buildings and grounds, considering factors such as siting, capacity, and integration with existing infrastructure.
- Explore opportunities for renewable energy procurement through power purchase agreements, on-site generation, and community solar programs.

c. Behavioral Change and Awareness:

- Educate the campus community about the importance of energy conservation and sustainability through outreach campaigns, workshops, and educational materials.
- Encourage energy-saving behaviors such as turning off lights and equipment when not in use, adjusting thermostats for energy efficiency, and using energy-efficient appliances and devices.
- Empower students, faculty, staff, and administrators to become energy ambassadors and champions of sustainability on campus.

d. Research and Innovation:

- Support research and innovation in energy efficiency, renewable energy, and sustainable technologies through academic programs, research grants, and partnerships with industry.
- Create opportunities for interdisciplinary collaboration and knowledge exchange in areas such as energy policy, engineering, environmental science, and economics.
- Foster a culture of innovation and entrepreneurship to accelerate the development and deployment of clean energy solutions.

e. Others:

- Energy conservation by encouraging the use of natural light
- Monitoring and benchmarking resource utilization and waste generation on a regular basis.
- Use of energy-efficient equipment with a star rating.
- Maintenance and replacement of additional lights/lighting fixtures with LEDs on a regular basis.
- Maintaining a sustainable approach by extending the life of existing equipment and replacing it with more efficient equipment as necessary.
- Before going on to the Replace & Recycle stage, reduce e-waste as much as possible with good maintenance.
- Make the most of natural light for indoor illumination and ventilation.
- To save energy, employ occupancy sensors in classrooms, hallways, administrative offices, and toilets, as well as sensor-based switches for streetlights and corridor lighting.

- Optimal temperature settings for air conditioners and water coolers are fine-tuned.
- Installation of renewable energy by installing a Grid Interactive Solar PV System on campus.
- Provide energy management and energy auditing training to staff and students.
- Develop project-based learning methodologies for energy conservation and management courses in collaboration with industry.

4. Waste:

a. Comprehensive Waste Management:

- Implement a comprehensive waste management system that includes recycling, composting, and waste reduction initiatives.
- Provide easily accessible recycling bins, composting facilities, and waste sorting stations throughout campus.
- Establish clear guidelines and procedures for waste disposal and recycling, including proper handling of hazardous materials and electronic waste.

b. Single-Use Plastics Reduction:

- Minimize the use of single-use plastics on campus through policy changes, procurement practices, and alternative packaging solutions.
- Promote the use of reusable products such as water bottles, coffee mugs, and shopping bags.
- Provide incentives and rewards for individuals and organizations that reduce their consumption of single-use plastics and adopt sustainable alternatives.

c. Waste Reduction Education:

- Educate the campus community about the environmental impacts of waste generation and the benefits of waste reduction and recycling.
- Offer workshops, seminars, and educational materials on topics such as waste diversion, composting, and sustainable consumer choices.
- Engage students, faculty, staff, and administrators in hands-on learning experiences and service projects related to waste management and recycling.

d. Collaboration and Partnerships:

- Collaborate with local municipalities, waste haulers, recycling facilities, and nonprofit organizations to improve waste management infrastructure and services.
- Participate in regional waste reduction and recycling initiatives, such as community clean-up events, recycling drives, and composting programs.
- Partner with businesses, vendors, and suppliers to reduce packaging waste and promote sustainable packaging solutions.

e. Others:

The college will strive to limit waste creation in all possible ways, including reducing the procurement of new materials, reusing, and recycling existing materials, and, if this is not possible, disposing of garbage in a manner that has the least environmental impact.

- The usage of plastic is prohibited on campus.
- Waste containers/Dustbins are positioned where they are needed.
- Composting of solid waste from canteens, guest houses, and hostels.
- Hazardous and E-waste must be handled, transported, and disposed of properly.
- Hazardous chemicals and toxic hygienic compounds will be used as little as possible at the college.
- As the final stage in solid waste reduction and a way to turn waste into a resource, the college has committed to a comprehensive recycling programme.
- It will separate, recycle, and utilize its solid wastes, as well as build a waste-to composting and bio-mass resource recovery programme.
- Engage in the 3Rs of environmental friendliness in a systematic way (Reduce, Reuse and Recycle).
- Collect and recycle paper waste generated on campus in collaboration with scrap merchants.
- Develop a technology-centric educational and administrative strategy to reduce solid waste.
- Supporting the digitization of attendance and internal assessment records reduces the consumption of paper.
- Update the college library's e books and e journals collection to reduce the need for printed books.
- Encourage students and teachers to utilize email to submit assignments.
- Take steps to raise student knowledge about food waste and strategies for reducing it.
- Minimizing the usage of packaged foods, as well as the habit of reusing and recycling non-biodegradable items
- Organizing solid waste management workshops for students.
- More arrangements for the disposal of institutional e-waste.
- Working with e-waste recycling firms to recycle electronic waste.
- Awareness among students about e-waste reduction and environmentally responsible e-waste disposal techniques.
- Encouraging e-waste management initiatives at the departmental and societal levels.

5. Water:

a. Water Conservation Measures:

- Implement water conservation measures such as efficient irrigation systems, low-flow fixtures, and water-saving appliances.
- Conduct water audits to identify leaks, inefficiencies, and opportunities for improvement.
- Retrofit campus buildings and facilities with water-efficient technologies and upgrades.

b. Rainwater Harvesting and Greywater Recycling:

- Install rainwater harvesting systems to capture and reuse rainwater for landscape irrigation, toilet flushing, and other non-potable uses.
- Implement greywater recycling systems to treat and reuse wastewater from sinks, showers, and laundry facilities for irrigation and other onsite applications.
- Ensure compliance with regulations and guidelines for rainwater harvesting, greywater recycling, and water reuse.

c. Education and Outreach:

- Educate the campus community about the importance of water conservation and responsible water use through outreach campaigns, workshops, and educational materials.
- Promote water-saving behaviors such as fixing leaks, taking shorter showers, and using water-efficient appliances and fixtures.
- Provide resources and tools for students, faculty, staff, and administrators to track their water usage, identify opportunities for conservation, and implement water-saving strategies.

d. Water Quality Management:

- Monitor water quality in campus water bodies, drinking water sources, and stormwater runoff to ensure compliance with regulations and standards.
- Implement pollution prevention measures to minimize contaminants such as sediment, nutrients, and chemicals from entering waterways.
- Collaborate with local government agencies, watershed groups, and community stakeholders to address water quality issues and protect aquatic ecosystems.

e. Others:

- Use effective management strategies to conserve water and reduce its use.
- Use of the least amount of water possible in accordance with its activities, and it will ensure that the water it uses is both provided and disposed of in the purest possible condition.
- A continuous water conservation programme would be implemented to track use, prevent leakage, and remove excessive or unnecessary use.
- It will also support artificial recharging and the resurrection of traditional groundwater recharging processes. • Encourage reporting leaks and swiftly repairing them.
- Employing a caretaker to take quick action to stop any water leaking from taps, pipelines, tanks, and toilet flushes, among other things.
- The institution shall promote efficient water use techniques, such as sprinkler or drip irrigation, in its gardening activities.
- Conserve water by building more Indian-style toilets rather than western-style toilets.

- In washrooms, wastewater created by a reverse osmosis (RO) system is reused.

Compliance and Review:

a. Monitoring and Reporting:

- Establish mechanisms for regular monitoring, evaluation, and reporting of environmental performance indicators.
- Collect and analyze data on key metrics such as energy consumption, greenhouse gas emissions, waste generation, water usage, and air quality.
- Develop dashboards, scorecards, and other tools to track.