

**ST. XAVIER'S COLLEGE OF EDUCATION
(AUTONOMOUS)**

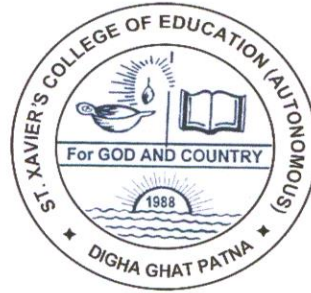
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NAAC Accredited with 'A' Grade (3rd cycle)

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Affiliated to Aryabhata Knowledge University, Patna



**Environment Sustainability
and Energy Conservation
Policy**

Approved by IQAC on 1st November, 2023


PRINCIPAL
St. Xavier's College of Education
(Autonomous)
Digha Ghat, Patna-800011

About Us

St. Xavier's College of Education (Autonomous), established in 1988, is an unaided minority teacher education institution managed by the Patna Province of the Society of Jesus. Renowned for its commitment to quality, the college is affiliated to Aryabhata Knowledge University, Patna, Bihar accredited by NAAC with an 'A' grade in the 3rd cycle and recognised under 2(f) and 12(B) by the UGC Act of 1956. The institution offers B.Ed., M.Ed., and Ph.D. programs, fostering holistic development and a strong sense of purpose in an inclusive environment.

Vision Statement

To foster a sustainable and environmentally conscious community by creating a green campus, promoting eco-friendly practices, and reducing the institution's carbon footprint.

Mission Statement

To integrate sustainability and energy conservation into educational endeavours, ensuring a cleaner, greener, and healthier environment for students, staff, and the community.

Objectives

1. Reduce energy consumption by 10% annually through efficient practices.
2. Minimize waste generation through effective waste management.
3. The institution aspires to achieve certifications like Green Campus or Eco Campus, demonstrating its commitment to sustainability.
4. Raise awareness of sustainability among stakeholders.
5. Continuously monitor and improve energy efficiency.
6. Extend sustainability practices to the community through student-led initiatives during school internships, such as plantation and sanitation drives

Existing Sustainability Infrastructure

St. Xavier's College of Education has implemented several sustainable practices and infrastructure to promote environmental stewardship:

1. **Solar Panels:** The institution has installed solar panels with a capacity of 20 KW, generating renewable energy fed into the grid, thereby reducing our reliance on conventional power sources.
2. **Rainwater Harvesting System:** The institution employs a two-stage filtration rainwater harvesting system with an annual water recharge capacity of 85 lakh litres. This system efficiently captures rainwater and recharges the groundwater table, promoting sustainable water resource management on campus.
3. **Solid and Liquid Waste Management:**
 - **Solid Waste Management:**
 - **Biodegradable Waste:** A dedicated composting unit, sized 8 ft × 3 ft × 2 ft, processes biodegradable waste such as leaves, grasses, kitchen waste, and other decomposable materials. The annual compost quantity is 2 tonnes, with

- a production capacity of 4 tonnes. The compost produced is utilized in campus gardens, promoting organic farming and sustainable gardening practices.
- **Non-Biodegradable Waste:** Non-biodegradable waste, including e-waste, is systematically segregated and sent to authorized recycling facilities, minimizing its environmental impact.
 - **Mulching:** Dried leaves collected from the campus are converted into mulch, which enriches the soil, conserves moisture, and reduces the need for chemical fertilizers in campus gardens.
- **Liquid Waste Management:**
 - **Soak Pit:** The campus features a soak pit located in a natural open area to facilitate the absorption and natural filtration of water, further supporting the rainwater harvesting system.
4. **Green Pathways:** The pathway to the main gate is lined with lush plantations that showcase a harmonious blend of functionality and beauty. One row features neem trees alternated with crotons and other ornamental plants, creating a visually appealing and environmentally beneficial landscape. Adjacent to the neem trees, different tree species further enhance the green cover, contributing to biodiversity, shade, and improved air quality. This thoughtfully designed pathway reflects the institution's commitment to sustainability and aesthetic harmony.
 5. **Shared Parking Facility:** The campus has a dedicated parking area accommodating both cycles and motorised vehicles, including scooters and bikes. This facility supports students, faculty and staff in choosing their preferred modes of transportation while promoting the use of eco-friendly options like cycling.

Energy Conservation Measures

1. Replacing traditional lighting with LED bulbs to lower energy usage.
2. Monitoring energy use to optimise efficiency.
3. The institution plans to incorporate motion-sensor lighting in classrooms and corridors to further reduce energy consumption.
4. Conducting workshops on energy-saving techniques for students, faculty and staff.

Sustainability Initiatives

1. **Green Campus Initiatives:** The institution maintains a designated no-vehicle zone near the main building entrance to minimise pollution and encourage walking, thereby promoting a clean and peaceful campus environment
2. **Eco-Friendly Transportation:** Promote carpooling, cycling, and the use of public transport to reduce carbon emissions.
3. **Biodiversity Preservation:** The institution is committed to preserving biodiversity by maintaining a variety of tree species, shrubs, and green spaces that provide habitats for birds, butterflies, and other fauna. Additionally, the medicinal plant garden serves as a valuable resource for promoting ecological awareness and traditional knowledge, further enriching the campus biodiversity.
4. **Promoting Indian Knowledge Systems (IKS):** The institution maintains a medicinal plant garden that serves as a valuable resource for fostering awareness of India's rich

traditional knowledge. The garden not only highlights the therapeutic and ecological significance of medicinal plants but also provides educational opportunities for students and staff to connect with the Indian Knowledge System.

5. **Sustainable Procurement:** Prioritize eco-friendly materials and supplies for institutional needs.
6. **Paperless Administration:** The institution promotes digital tools for administration, record-keeping, and communication to reduce paper usage. Similarly, teaching and learning materials are increasingly being shared digitally to minimize waste.
7. **Environmental Education:** Insert sustainability topics into academic programs and student projects.
8. **School Outreach Initiatives:** As part of B.Ed. internship programs, students participate in plantation drives and sanitation campaigns in schools. These activities not only promote environmental awareness and cleanliness among school students but also empower teacher trainees to become advocates of sustainability in their future roles as educators.
9. **Care for Campus Wildlife:** During extreme summer months, when water is scarce, the institution places earthen pots filled with water and food grains at strategic locations around the campus. This initiative ensures that small creatures like birds and squirrels have access to water and food, promoting biodiversity and fostering compassion for wildlife.

Rules for Minimizing Energy Consumption

To maintain a sustainable, peaceful, and eco-friendly campus, the following rules are observed:

For Students:

1. Turn off lights, fans, and electronics when not in use.
2. Report any energy-related issues to campus authorities promptly.
3. Participate actively in sustainability awareness programs.
4. Use reusable bags, water bottles, and lunch containers, pens to minimize waste.
5. Students being dropped off by guardians in two-wheelers or four-wheelers must be dropped outside the campus premises.
6. Avoid honking when entering the campus.
7. Drive or cycle cautiously and park vehicles only in the designated parking space.
8. The entry pathway to the main college building is a no-vehicle zone. Students must walk in this area to maintain a pollution-free environment.
9. Students should avoid plastic covers and files for submitting their assignments.

For Faculty:

1. Turn off lights, fans, and electronic equipment when not in use.
2. Report any energy-related issues or infrastructure malfunctions promptly to the administration.
3. Utilize digital resources and tools instead of printing materials wherever feasible.
4. Incorporate environmental education and sustainability topics into teaching and encourage students to adopt sustainable practices.
5. Actively participate in and support campus sustainability programs, such as tree plantation drives and waste management initiatives.

6. Respect the campus no-vehicle zone by refraining from driving vehicles into restricted areas, including the pathway to the main college building.
7. Park all vehicles, including cycles, motorbikes, and cars, only in the designated parking space.
8. Avoid honking within campus premises to maintain a peaceful environment.
9. Lead by example by practising sustainable habits, such as using reusable items (e.g., water bottles, and lunch containers) and conserving energy.
10. Collaborate with students and staff to implement innovative sustainability solutions and foster a culture of environmental responsibility.

For Staff:

1. Regularly maintain and ensure the proper functioning of energy-efficient equipment and infrastructure.
2. Monitor energy usage in offices and shared spaces, and report any anomalies or equipment malfunctions to the administration.
3. Adopt sustainable procurement practices by prioritizing eco-friendly and energy-efficient materials and supplies.
4. Use digital platforms for communication and record-keeping to minimize paper usage.
5. Ensure proper segregation and disposal of waste according to campus waste management protocols.
6. Avoid single-use plastics and encourage the use of reusable materials in daily operations.
7. Actively participate in sustainability awareness programs and other institutional initiatives, such as tree plantation drives and workshops.
8. Promote the no-vehicle zone by limiting unnecessary vehicle use on campus premises and parking only in designated areas.
9. Avoid honking and maintain a calm and noise-free atmosphere on campus.
10. Lead by example by adopting and demonstrating sustainable habits, and inspiring students, teachers, and fellow staff members.

Implementation and Monitoring


1. An Energy Committee oversees the implementation of the policy and tracks progress.
2. Feedback is gathered from stakeholders to improve policy effectiveness.
3. The institution is committed to achieving the outlined objectives in a phased manner, with regular reviews to ensure timely progress.

Review and Revision


The policy will be reviewed and updated every two years or as needed to ensure its relevance and effectiveness.

Approval

The IQAC of St. Xavier's College of Education has approved this environmental sustainability and energy conservation policy.



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Chairperson & Principal
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