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Energy Conservation Policy

Preamble

Energy is indispensable for the progress of both Nation and organizations. with its cost being a significant concern for both sector, Compared to Japan, the USA, other Asian countries, and the global average, our nation has a higher energy intensity. This metric reflects a country's development level and its energy efficiency. Currently, about 70% of our energy needs are fulfilled by generating electricity, mainly through thermal power stations, which primarily rely on burning fossil fuels—a major source of environmental pollution. The Energy Conservation Act of 2001 was established to enhance energy efficiency and decrease energy intensity, underscoring the crucial aim of achieving sustainable growth. The narrative underlines the interconnection between energy, environmental preservation, and ecological balance as foundational to this goal. Energy management is described as the careful and effective utilization of energy to ensure that necessities are met without compromise, aiming at augmenting profits while curtailing environmental harm. The document points out the significant opportunities for energy saving that lie in implementing energy management strategies across every economic sector. Raising awareness about energy conservation at every level is deemed essential for motivating participation in these programs, which serve not only as a strategy for businesses in managing energy but also as a step towards sustainable environmental stewardship. Energy audits are highlighted as key instruments for uncovering opportunities for energy savings, blending technological and economic considerations into actionable strategies. Ultimately, the emphasis is on the necessity of proficient energy management, heightened awareness, and the adoption of conservation practices to ensure environmental sustainability and protection.

Our Mission:

- Our objective is to reduce energy usage through the utilization of energy-efficient equipment and maximizing reliance on sunlight, natural ventilation, and energy alternatives.
- Optimize the utilization of renewable energy sources.
- Foster awareness regarding energy conservation.

Our plan to achieve:

- Optimize energy resource management through the adoption of cleaner and more efficient technologies.
- Educate faculty, students, and staff to position the institute as a leader in energy conservation practices.
- Enhance awareness of energy conservation and conduct frequent in-house energy audits to pinpoint opportunities for saving energy.
- Aim for the optimal use of solar energy within the campus.
- Transition from traditional lighting to LED technology to conserve energy. Implement energy-saving measures such as reduction, reuse, and recycling wherever feasible.
- Organize webinars, seminars, and conferences focusing on environmental and energy conservation topic.

Objectives of Energy Management:

- Enhancing energy efficiency will lower both energy use and expenses.
- Mitigate environmental damage.
- Strive for energy conservation on campus.
- Embrace renewable energy sources.

Energy Management Principles:

- Obtain energy at the most economical rates.
- Employ energy with maximum efficiency.
- Utilize low-cost investments.
- Embrace the principles of reduce, reuse, and recycle.
- Emphasize the utilization of renewable energy sources.

Types and Use of Energy:

Type of Energy	Energy Usage
Electrical Energy	Indoor and outdoor illumination, Ventilation, Air conditioning, Water pumping, Computer labs
LPG	Mess and canteen for food preparation
Solar Energy	Wheeling to the grid

Electrical Supply System: Electrical supply to Chandigarh College of Pharmacy is through the PSPCL Grid. Electrical supply is distributed to various blocks of the campus adequately to avoid mechanical damage.

Backup Power supply: Backup supply arrangements are provided to the entire campus by the installation of a diesel generator.

Save Energy Tips for Students and Staff:

- Disconnect all appliances when not in use.
- Go for LED lighting.
- Power down the system entirely instead of just logging off, when feasible.
- Turn off unneeded lights and make the most of natural daylight.
- Ensure lights and fans are turned off in classrooms, lecture halls, labs, and seminar rooms when they're empty.
- Operate air conditioning only as necessary

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**Policy Document on Green Campus Environment
And Waste Management**

Preamble

Chandigarh College of Pharmacy has implemented a wide array of green initiatives, fostering an eco-conscious environment on its campus. This dedication to cultivating a green campus is a testament to the college's commitment to environmental sustainability and enhancing community well-being. Through these eco-friendly measures, the college actively contributes to environmental protection and the promotion of sustainable practices. The ethos of a green campus is built on embedding environmentally friendly practices into educational processes to foster sustainability. Faculty, staff, and students are encouraged to engage in activities that minimize pollution, reflecting the college's dedication to being stewards of the environment. Efforts to prevent water wastage are highlighted, underscoring a pledge towards conserving water. The campus community is also motivated to save energy, possibly through embracing energy-efficient methods and technologies. Encouraging the adoption of sustainable practices, the college aims to improve the quality of life for both the campus inhabitants and the wider society. In adopting these green practices, Chandigarh College of Pharmacy not only champions a sustainable campus environment but also nurtures a culture of environmental responsibility among its members.

Introduction:

The institution is adopting the green campus concept as a means to reshape its environmental ethos and meet the environmental, social, and economic demands of humanity. The development of a policy document highlights the institution's dedication to the green campus initiative, lending both clarity and legitimacy to its endeavors. This policy document has been crafted to provide clearer insight and authenticity to the green campus initiative. It outlines specific actions to enhance the campus's environmental friendliness and implement energy-saving strategies.

The objectives of green initiative implementation within the campus are:

- Enhancing the campus's green cover through tree planting.
- Maintaining a clean campus environment by adhering to the 3 R's: reduce, reuse, and recycle.
- Engaging students in environmental awareness initiatives such as Swachh Bharat Abhiyan, Swachhta Pakhwada, and Swachhta Hi Seva

- Promoting the use of eco-friendly materials like paper, cloth, and jute to decrease reliance on single-use items such as plastic, coated paper cups, and straws.
- Generating biogas from food waste and human waste to reduce the use of LPG in the hostel kitchens.
- Advancing energy conservation efforts by installing solar panels, solar water heaters, LED lighting, and sensor-based technologies on campus.
- Implementing rainwater harvesting, along with the use of recharging pits and wells, to fulfill the growing water needs of the campus.

Action Plan:

- Promote initiatives for planting trees
- Implement a campaign and activities to raise awareness about the green campus initiative.
- Conduct programs to promote awareness of eco-friendly practices.
- Launch a campaign to educate on energy-saving strategies.
- Guarantee appropriate waste management practices.
- Maximize the use of solar energy across the campus.
- Conduct a green audit on campus to assess the achievement of the policy's goals.
- Establish rainwater harvesting systems to replenish groundwater supplies.

Green Campus Initiative on the Campus:

- Afforestation campaign
- Promotion of bicycles and e-rickshaws for campus transportation
- Management of e-waste, solid waste, and liquid waste
- Elimination of plastic from the campus
- Implementation of a digital library
- Limited access for automobiles on campus
- Implementation of rainwater harvesting systems
- Promotion of pedestrian pathways on campus
- Reduction in the use of disposable plastic bottles, cups, and utensils
- Rooftop solar panel installation
- Sanitation campaign

Water Conservation and Management Policy

Chandigarh College of Pharmacy has implemented a water conservation and management policy aimed at ensuring sustainable water usage to address both present and future needs on campus. The policy underscores the importance of efficient water storage as a practical measure for water conservation. It emphasizes the necessity for concerted efforts to safeguard the surrounding environment and available water resources. Furthermore, it emphasizes the institution's ethical obligation as an institute of higher learning to disseminate water conservation messages within both the academic community and society at large. In recent years, the Institute has undertaken various initiatives to enhance water efficiency on campus, including awareness campaigns focused on preserving streams, rivers, ponds, and land. The college recognizes the pivotal roles that students and staff play in advancing its water sustainability objectives. Engaged in efficient conservation, responsible consumption, and efforts to restore and recharge groundwater, Chandigarh College of Pharmacy encourages active participation from all stakeholders in supporting policies and programs aimed at water conservation. Evidently, the college has established a comprehensive water conservation and management policy, indicative of its steadfast commitment to sustainable water practices. Key components of the policy include:

- Implementing various initiatives in recent years to optimize water usage across the campus.
- Conducting awareness campaigns aimed at preserving streams, rivers, ponds, and land.
- Encouraging the endorsement of policies and initiatives for water conservation by all stakeholders, achieving a sustainable equilibrium through precise monitoring of water volumes and waste reduction.
- Stressing the imperative for concerted efforts in safeguarding the surrounding environment and available water resources.
- Acknowledging a moral obligation as an institution of higher learning to advocate and disseminate the message of water conservation within the academic community and society. Delivering water conservation education to all stakeholders.
- Fostering research and the adoption of practices that promote the efficient utilization of water.

Initiatives of Chandigarh College of Pharmacy

Chandigarh College of Pharmacy is actively pursuing initiatives to enhance its water sustainability efforts. These endeavors, including the adoption of water-efficient fixtures, wastewater treatment technologies, and rainwater harvesting, underscore the institution's dedication to responsible water management.

- The college is committed to enhancing water resources and ecosystems surrounding the campus. Operation of the Sewage
- Treatment Plant aligns with regulations set by the State Pollution Control Board to ensure compliance.
- Construction of a large dug well enhances rainwater harvesting efforts, further contributing to water sustainability. The college has a facility to collect water from artificial pits near ponds and filter it into the pond after treatment. This contributes to the conservation and reuse of water.
- The STP recycles sewage to produce water suitable for gardening. The clean water generated is used for watering gardens and sports grounds.
- Engaging in organic farming practices on a 2-acre plot demonstrates the college's commitment to sustainable agriculture and resource management.
- Incorporating water-efficient fixtures in new constructions underscores the college's commitment to water conservation. Moreover, 100% treatment and recycling of sewage through a Sewage Treatment Plant (STP) highlight its dedication to sustainable practices, with treated water being repurposed for gardening.
- Implementation of rainwater harvesting units throughout the campus serves to address future water needs effectively.
- Natural filtration of rainwater into five on-campus ponds mitigates water scarcity, with additional water collection facilitated by artificial pits adjacent to the ponds.
- Utilizing artificial pits to collect and treat water before reintroducing it to the ponds exemplifies the college's efforts in water conservation and reuse.

Goals and Plans

Implements water conservation and rainwater harvesting systems across all existing buildings, ensuring that established infrastructure contributes to sustainable water practices.

- Encourages investment in and maintenance of efficient water infrastructure and green infrastructure in all future development plans, underscoring the importance of integrating sustainable water solutions into upcoming projects.
- Promotes the adoption of innovative water and wastewater management technologies and services, demonstrating a commitment to staying abreast of advancements in water management.
- Provides training on the college's water conservation measures to students, staff, and stakeholders, recognizing education as a vital element of sustainable water practices.
- Ensures awareness of the college's water conservation policy among all stakeholders, fostering a shared understanding of the institution's dedication to water sustainability.
- Raises awareness about the cost-effectiveness of water conservation projects among students and the local community, highlighting the economic benefits of sustainable water management.
- Focuses on enhancing water quality and recycling non-sewage and greywater for on-site use, considering diverse water quality requirements.
- Facilitates collaboration between environmental, societal leaders, and policymakers to identify barriers and opportunities for increasing the role of conservation and efficiency in sustainable water supply systems.
- Organizes outreach programs led by NSS and other student bodies to engage the community in water conservation efforts.
- Encourages research, development, and implementation of water conservation techniques aligned with ecological needs.
- Enhances understanding of water systems, including groundwater and its interaction with surface water, and raises awareness about the impacts of climate change on water resources among students and faculty.
- Informs, educates, and raises awareness about the significance of water to life and the imperative for conservation and efficient use.

- Promotes the protection of streams, ponds, rivers, and surrounding public areas, acknowledging the importance of preserving natural water resources.
- Advocates for maximizing water efficiency and minimizing waste, fostering a culture of responsible water consumption.
- Implements water conservation and rainwater harvesting systems across all existing buildings, ensuring that established infrastructure contributes to sustainable water practices.