



# GREEN CAMPUS, ENVIRONMENT & ENERGY POLICY



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## **Introduction of the College:**

Dolphin (PG) Institute of Biomedical & Natural Sciences, Manduwala, Dehra Dun (Uttarakhand) is affiliated to H.N.B. Garhwal Central University, Srinagar, Uttarakhand since August 2002.

It was established under the aegis of Dolfin Educational Society of India, New Delhi, which was registered under the Society Act XXI of 1860. Institute has been recognized by University Grant Commission (UGC) u/s 2(f) of UGC Act.

Dolphin (PG) Institute is located at the outskirts of Dehra Dun City, is surrounded by a thick forest cover and captivating natural fauna and flora. Upon entering the campus, the first thing one notice is a sense of calm amidst a flurry of activities. The peaceful atmosphere and the salubrious climate provide a perfect setting for young minds to absorb knowledge. The institute presents a picture that is full of life and cheerful energy.

Institute has been recognized as **District Green Champion** by MGNCRE (Mahatma Gandhi National Council of Rural Education) Ministry of Education consistently in the year 2021 and 2022 for maintaining the green campus, proactive involvement in the eco friendly and energy conservation activities to promote sustainable development.

Institute is certified for Social Entrepreneurship, Swachhta & Rural Engagement cell in the year 2020 by MGNRC.

## **Scope of the Policy:**

The Institute's **GREEN CAMPUS, ENVIRONMENT & ENERGY POLICY** is framed to provide an overview of the Institute's vision to maintain the green and salubrious campus and promote eco friendly work culture. Emphasize is given to minimize the environmental impacts of its activities and optimal utilization of the available resources for sustainable development. The concept of 3Rs: Reduce, Reuse and Recycle has been adopted.

The policy aims to inspire the stakeholders to be sensitive towards the environment helps not only for protecting the environment but also to promote economic stability. By dropping our energy consumption, we can minimize the demand for fossil fuels and appreciably contribute in reducing the greenhouse gas emissions. These activities all together contribute to mitigate climate change, air pollution, and other environmental issues. Moreover, energy conservation can lead to substantial cost savings. The Green Campus, Environment and Energy Policy has been framed after a thorough review of all infrastructural, administrative working from the viewpoint of energy efficiency, sustainability and the environment.

**The focus areas of this policy are:**

**→ Clean Campus Initiatives:**

- The cleanliness in the campus of the Dolphin (PG) Institute is maintained throughout the year. Special emphasize is given in accordance to **Swachh Bharat Abhiyan**.
- The Eco- club ( Prakriti) along with the departments , NSS , NCC and DSW conducts programmes like competitions , awareness campaigns, seminars , workshops , technical sessions to maintain good hygiene and cleanliness practices in the Institute. Such activities are also organized for the neighboring villages.
- Dustbins are placed everywhere in the campus.
- Cleanliness drive held regularly to pick the plastic and other non biodegradable waste from the surrounding area of the Institute and villages.
- Students, Staff and faculty are also encouraged to participate in the cleanliness drive activities.
- The plant waste like dried leaves are collected regularly and used for in house composting.
- Slogans are placed for maintaining the campus clean and green.

**→ Landscaping Initiatives:**

The landscape design unify the campus aesthetics, institution's identity and core values. The Dolphin (PG) Institute is known for its clean and green campus surrounded by natural forest and fresh air. Upon entering the campus, the front view has beautiful green lawns on both side of the building with variety of flowering plants. At the front of the main gate an elevated lawn with flag

post at the centre and surrounded with attractive flower beds makes the striking view. The sloping terraces are covered with attractive creepers. Two statues of Dolphin with fountain is placed on way to enter the reception area.

Lush green patches are maintained inside the open space of the building to create soothing environment.

An open space with grass and beautified by landscaping at the corners has been created to provide opportunities for recreation, outdoor activities, relaxation and aesthetic enjoyment.

Extensive green cover supports a diverse range of animals, birds and insects including butterflies in the campus.

Regular activities related to plantation drive, identify and putting the botanical name plates, activities connected with botanical garden, herbal garden, study of flora and fauna at the campus boosts the interest and commitment of the students towards the ecosystem.

#### **→ Clean Air Initiatives**

- The campus maintains greenery with wide variety of plants, herbs, shrubs and trees surrounding the campus boundary.
- A small botanical garden and garden with medicinal and aromatic plants are also maintained.
- To reduce dust, lawn at the front and open field at the back side of the building is covered with grass.
- In compliance with National Tobacco Control Programme (NTCP) 2007-08, Institute prohibits smoking and use of tobacco.
- Awareness campaigns are conducted and hoardings for No smoking and tobacco free campus are placed.
- The entry of the automobiles is restricted inside the campus to maintain smoke free environment.
- Green waste is used in composting and other dry waste is properly disposed.
- Burning of waste is strictly banned.

### **Infrastructure initiatives:**

- The Institute's building is designed in a way that natural light, fresh air is available in almost all the rooms. A well-lit workspace ensures alert brains and teaching learning process and other tasks can be performed efficiently. Apart from this natural lighting has been proven to increase health and comfort levels for building occupants.
- Using natural light is also an eco-friendly and sustainable option, making it an excellent way of keeping in tune with the environment.
- The roofs are with slops and water collected is utilized for gardening and other cleaning purpose.
- Water Conservation through Rainwater Harvesting System is proposed.
- The Institute has installed a 100 KV Grid Tie roof Top Solar PV System, covering 1080sq mts. of roof top area. Average power generation is 1650 (approx) KW per year, which is equivalent of 165000units of electricity per year.
- The North and South blocks of the building is well connected through the stairs and elevator. For the convenience of Divyangjan ramps are available.
- Apart from the greenery in the campus the corridors has provision for hanging pots and planters are also placed in the corridors.
- Energy efficient equipments will be purchased in future to reduce electricity consumption.

### **Waste Management**

#### **Solid Waste Management initiatives:**

- Engage in the 3 Rs to adapt environment friendly procedures (Reduce, Reuse, and Recycle).
- Minimize the use of paper in day to day working. ERP system, biometric attendance of student, faculty and staff. Digitization of the process reduces the consumption of paper.
- Recycling of the paper waste generated in collaboration with scrap merchant.
- Staff and students are motivated to submit projects and assignments online and provide e-notes.
- Use of digital library INFLIBNET is promoted.
- Usage of single use plastic is prohibited in the campus.

- Biomedical waste management committee of the Institute monitors the proper segregation of the biomedical waste in colored Bins and proper disposal through Medical Pollution Control Committee as per biomedical waste management rules -2016 amended 2018.
- Other solid waste generated is also handled, transported and disposed off properly.
- Provision for Composting of solid waste from campus is done.

**Liquid waste management initiatives:**

- Introduced effective utilization of water and avoid waste by any means like leakages in pipe lines, taps and toiled flush.
- Installation of the Rain water harvesting system in the campus is planned.
- Reuse of waste water generated by the reverse Osmosis (RO) systems for drinking water.
- Pits are made to collect the rain water.

**E-Waste Management initiatives:**

Institute assures that usage of technology and e - waste generation does not harm the environment. Keeping this in view Institute intends to incorporate following in the Energy and Environment policy:

- Awareness campaign / programmes for reducing the e-waste generation among the students and staff.
- Collecting the e-waste from the Institute and surroundings.
- Collaboration with e-waste recycling agencies to get the e-waste recycle.
- Encourage faculty to take research initiative for e-waste management.
- Organize LED repairing workshop for reuse and reduce e-waste.

**Plastic free campus initiatives:**

- Single use plastics is banned in the campus.
- Awareness and cleanliness drives are carried out in the surroundings for plastic waste collection.
- Plastic bottles to store / carry water is replaced with glass or steel.

- In the conferences / Workshops / Symposium jute bags are used.
- A practice has been made to present planters to the guests to avoid use of transparent plastic sheets in Bouquets.
- For backdrop on any programme digital banners are used instead of polyvinyl.

### **Environmental centric Student Societies and Department Activities**

- Tree plantation drive in the campus and outside by NSS, NCC and DSW.
- Distribution of the tree saplings complimentary to promote tree plantation.
- Bird houses were placed by Eco club in the campus to provide a safe and secure environment to them and enhance the biodiversity of the campus.
- Students are motivated to take small projects / assignments to enlist the flora and fauna of the campus.
- Celebration of the environment related and energy conservation days in the activity planner has been included:

Environment Day, Earth Day, Wild life week, Save the Sparrow, International day for Biodiversity, National Pollution Control Day, International Hug a Tree Day, World Soil Day, Farmers Day, World Wet Land Day, World Water Day, National Energy Conservation Day.

### **Energy saving Initiatives:**

- Where ever possible, we intend to reduce the electricity consumption.
- Awareness campaign are carried out to switch off lights, fan, AC, computer monitors before leaving the class rooms, laboratories and the offices.
- Energy efficient light bulbs are used.
- To purchase environmentally efficient electrical appliances that save energy.
- Institute is committed to manage its electricity consumption in a sustainable manner.
- Institute has installed a 100 KW Grid Tie roof top solar PV system, covering 1080 square meters roof top area. Average power generation is 1650 KW (approx) per year which is 16500 Units of electricity per year. This helps us to save amount spent on electricity.

### **→ Green Audit:**

To ensure that the objective of maintaining the green and clean campus Institute aims to regularly conduct the Green Audit by internal committee and by the external authorized agency to undertake the process.

Environmental sustainability has become a significant concern at the present scenario and Green Audit will advise the reduction of the adverse impact on the environment due to the Institutional activities.

Audit data will be utilized to enhance environmental sustainability and will help us to assess our weak points and guide us to plan accordingly in future. It will also provide better understanding to adapt eco friendly practices.

It will further promote environmental values and ethics among the students and staff.

The eco friendly campus provides conducive environment for teaching learning process and a healthy ecology for everyone involved with the facility.

### **→ Environment Audit:**

Environmental audit aims to guide us for adapting good environmental practices to minimize the risks due to human activities and enhance human safety and health. Environmental audit will facilitate the institute to Identify opportunities for improvement in environmental management and performance to drive increased efficiency and cost savings,

### **→ Energy Audit**

Energy audit helps in energy cost optimization, pollution control, safety aspects and suggests the methods to improve the operating and maintenance practices of the system. Dolphin (PG) Institute is committed to establish short and long term goals to meet and exceed zero carbon campus objectives. In this aspect Institute will conduct the Energy Audit internally and by the external agency.