

# ENVIRONMENTAL POLICY

## (ZERO WASTE AND GREEN CAMPUS)

Carmel College of Arts, Science & Commerce for Women is nestled at the foot of the hills in the serene village of Nuvem, close to the city of Margao, in the state of Goa. Expanding over 35-acre hilly plot of land; earlier a cashew plantation, 35% of which is built up area for the College (UG & PG) buildings, Higher Secondary building, Carmel Hostel and Sisters Quarters. The college is endowed with natural greenery all around and is rich with verdant plantation that beautifies the campus with flowers and fruit throughout the year. It is a very pleasing and aesthetic sight to the eyes of the beholder. The remaining area behind the buildings is a dense forest which remains pristine and untouched hosting rich floral and faunal biodiversity, and having its own ecological importance in terms of being a carbon sink and ensuring rainwater harvesting. The areas which have been used for the College buildings are landscaped to include many open and green spaces throughout. Every classroom or laboratory or department space or library or the auditorium looks out onto a green vista ensuring ample natural light and ventilation.

The Environmental Policy of Carmel College of Arts, Science & Commerce for Women, Nuvem Goa outlines the initiatives to ensure that each of the stakeholders is aware of their roles and responsibilities towards judicious use of resources. The College strives towards conserving the biodiversity of the campus, energy, water and reducing / better managing of the waste. A Green Audit is initiated to identify areas for improvement and to design strategies to conserve energy and water and to manage waste in a responsible manner.

### **Environment:**

- At the beginning of each academic year, during the general orientation for FY students conducted by the Principal, awareness is raised about the need to protect and preserve the environment, inculcating in them a sense of responsibility during their formative years on campus.
- The College constantly strives to sensitize students through various curricular, co-curricular and extra-curricular activities about the need to protect and preserve the environment.

- Community outreach programs are also undertaken to inculcate environmental consciousness in Nuvem village.
- The college campus is beautifully landscaped with garden plots at various locations with exotic and rare plants in addition to the natural flora of the campus which is taken care of by the dedicated management personnel and N.S.S. volunteers.
- Compost pit is dug which is filled with dry leaves collected from the campus and the manure thus formed is used for the plants.

#### **Energy:**

- Signage boards are put up near switch boards in all classrooms and other prominent places as a reminder to switch off lights and fans and other electrical appliances when not in use.
- Non-functional fluorescent tube lights and incandescent bulbs are gradually phased out and replaced with energy efficient LED tube lights and bulbs as an energy saving measure. At present, LED lighting contributes to 43% of the total lighting consumption on campus.
- The College has installed a grid-connected Solar PV system to harvest solar energy for meeting part of its electric energy requirement.

#### **Water:**

- Water purifiers and water coolers are installed in strategic locations to ensure availability of safe drinking water.
- Issues related to water wastage and leakages (if any) are addressed promptly. Waste water from the campus is managed through soak pits and septic tanks.
- Coolant water from the water distillation units in the Biology Laboratory is collected in large drums and used for washing glassware; the excess water is channeled to recharge ground water in the botanical garden.
- The campus is a natural rainwater catchment area having vast forest cover which helps in auto recharge of groundwater. Additionally, about ten two square meters pits are dug at strategic locations to harvest the runoff water from the hill for additional groundwater recharging and these are being renewed every year.
- Washrooms in the entire campus are hygienically maintained and cleaned regularly.

**Waste:**

- Waste generated on campus is managed by setting up of Waste Segregation Stations comprising of color coded bins at strategic locations. The segregated waste is handed over to the Nuvem Panchayat on a weekly basis for further management. Other waste such as paper, cardboard etc. is sold to recyclers.
- E-waste is managed through a tie up with M/s Global E-waste Management System, Nessai, Goa.
- The ample plant waste on campus is composted using various methods such as use of leaf composters and pits while the fresh waste from the canteen is managed in the vermicomposting unit generating rich organic manure to nourish the vast landscape on the campus.

**Date of implementation: February 2020**

**Policy review date: February 2023**