

Green & Sustainable Policy

Of

C. V. Raman Global University



Proposed by

Green Cell

C. V. Raman Global University

The vision of Green & Sustainability Cell:

Green, Clean and Sustainable Lifestyle in Campus and Off-Campus

The mission of Green & Sustainability Cell:

- ✓ Green Campus
- ✓ Clean Campus
- ✓ Reducing Carbon Footprints
- ✓ Net Zero Energy Consumption
- ✓ Green Campus Rating
- ✓ Adopting and Promoting Green and Sustainable lifestyle
- ✓ Adopting & Promoting Green Products
- ✓ Recognition and awarding Green Initiative, Innovations & Startups
- ✓ Promoting Green Economy
- ✓ Promoting Rural Economy
- ✓ Dedicated to plastic free campus

Introduction

Universities can play a significant role in forging the path to a sustainable future. By their nature, universities are focused on research, teaching and service and as institutions, they are tasked with training the world's future leaders. As universities' mission and activities are not directly tied to financial or political gain, they have the capacity to test systems and technologies, and to advance innovative solutions to global challenges in ways that companies and municipalities cannot.

Universities manifest sustainability in two ways that should be complementary, but are often seen as distinct – curriculum and operations. Academic staff members are generally considered authorities and have the capacity to actively contribute to solutions at various stages and levels. As we demonstrate to the public, staff, and students that we are responsible and willing to take the lead in creating a more sustainable tomorrow, we are doing so in a way that benefits from the credibility of the university voice. In other words, we have the ability to manifest sustainability – not only in theory, but in practice in everyday life on university campuses.

Given the nature and scope of global sustainability challenges, there is a real responsibility and urgency associated with tackling operational sustainability within our universities. There is also a need for a paradigm shift from institutions developing ad hoc sustainability programmes autonomously to a more collaborative effort to unite voices and learn from each other's experiences. For this reason, C. V. Raman Global University (CGU) have taken on the challenge to work together with IGBC and other organisations, to promote and share our joint best experiences on the road to sustainability.

Our Green Policy

C. V. Raman Global University endeavours to achieve a human – environment co-existence model which would promote society's welfare through environmental protection. The policy visualizes setting a national and international benchmark for a socially and environmentally sustainable campus, through action plans for environmental education, management and conservation from where, "liberation through knowledge" is realized. To fulfil this vision, the University is obliged to institute a Green Policy which will:

- Be the fundamental consideration of the university in all its future endeavours. The university shall in the matters of future developments, infrastructure constructions and action plans refer to the green policy and abide with the green regulations set forth in this document. University shall integrate environmental concerns into its everyday practice. In addition, University shall comply with all applicable legislation, regulation and codes of practice related to Green Protocol stipulated by the State Government.
- Endorse university's commitment to sustainable development through all means. Adopt best practices for environmental protection; observe conservation, environmental laws, regulations and standards. The University has a responsibility and desire to educate members of the University Community to engage effectively as global citizens, steward our natural resources in a responsible manner, foster a university culture that supports and promotes the values and principles of social and environmental sustainability, and work towards a sustainable and just future in cooperation with organizations at the local, state, national and global levels.
- Motivate University to maintain and increase the green cover area of the campus in the coming years. While increasing green area, native species of flora suitable for this ecosystem should be given importance. Periodic investigations into the spread of invasive species that tamper with the ecological balance of the university campus should be conducted and measures taken up to control the spread. The identity of the university campus could be built around such an ecosystem.
- State University's commitment to reduce energy consumption and reduce wastage of energy. Explore renewable energy sources as far as possible. In order to do this, the university shall establish and maintain strategic partnerships with student and teaching communities, local governments, private companies and non-governmental organizations (NGOs) to develop and promote sustainable practices and to identify and address sustainability challenges in the energy sector.
- Stand for increasing, sharing and exchanging environmental awareness and protection amongst campus community and the society at large. A study on the ecosystem of the university campus is to be done. This could be updated regularly. Trans - disciplinary attempts to improve the existing ecological knowledge and for promoting environmental awareness should be given prominence.

- Urge university to decrease the amount of waste generated by constantly monitoring the sources and through the policy of Reduce, Reuse and Recycle. University should implement sound long-term waste management strategies to reduce overall waste production and increase the recycled component of the waste stream.
- Pave way toward implementing use of eco-friendly technologies for utilizing natural resources efficiently. The purchasing policy of the university should be altered to promote those products and services which cause the least harm to the environment. This should include supporting alternative eco-friendly, products made locally. The purchase policy should also reflect the fair trade commitments. Repair and reuse, setting aside maintenance funds and ensuring long term use of products purchased should be given priority before going in for new products.
- Establish **Green & Sustainability Cell** which will be empowered to Advise University, take decisions and execute them regarding the sustainable environment management of the university campus. The committee will be accountable to the university statutory regulatory bodies and also shall abide by the laws and regulations existing in our country. Committee shall endeavour to reduce harmful effects on the environment, human health and safety.
- Create awareness regarding the environmental impact and the carbon footprints that the university generates and carry out annual environmental auditing in consultation with the experts and with the participation of the university community and take necessary measures to address the issues raised by such inquiries.
- University will hereafter explore the possibilities of adopting eco-friendly architecture and green buildings. As a university campus dedicated to the disciplines of engineering and management, the built environment of the university should also reflect university's commitment towards ecology as far as possible through innovative engineering and management.
- State university's commitment towards ensuring the quality of food purchase, preparation and serving in university canteens and hostel messes towards enhancing the health of the campus community and the environment.
- Pave ways to reduce the use of polyethylene materials (plastic) and promote the use of biodegradable materials for day-to-day life inside the campus.
- Implementation of reuse of wastewater for gardening and beautification purposes after their treatment. Hence, reducing the discharge of treated wastewater.

The structure and functions of the Green Cell

Green & Sustainability Cell will be constituted with representatives from among faculty, President/Secretary of student's Chapter, Students from environmental groups in the campus, administrative staff, engineering staff, and the sanitation /cleaning staff, nominated by the Vice Chancellor.

The committee would be constituted for a period of two years.

The committee will be entrusted with the task of creating action plans according to the Green policy of the campus and would give necessary support to the various departments in the university to implement the action plans. The environmental policy of the university should be sensitive towards the changing ecological requirements of the society and of the university campus and therefore the action plan should be modified, after a thorough review, as and when required.

The committee should be empowered with the task of ensuring that environmental sustainability of university is considered as of utmost importance and with approving the university development plans with minimum harm done to the existing biodiversity and ecology of the campus.

The committee will also be in charge of designing and implementing various awareness campaigns to achieve the Green Campus status.

The committee shall ensure that interdisciplinary courses that address ecological concerns are designed and taught in the university at different levels. The committee shall also work towards promoting interdisciplinary research that promotes ecological concerns.

Special invited guests from outside the university like Panchayat members; environmental activists; Forest department officials, and members from research institutes shall be allowed to attend meetings as consultants as and when considered necessary by the Green Cell, especially while considering development plans that could affect the society as large. But, the decisions shall be taken with the consent of the two third majority of the members in the committee.

Environment Management Fund:

The university should constitute an environment management fund, which could be utilized for the recurring maintenance expenditures for ensuring a sustainable campus, within the obligations and for the functions of the Green Cell. This fund could be utilized for the ensuring a green area of the campus, for the maintenance of alternative energy sources like solar panels, the rain water harvesting system, biogas plants and for the repair of the furniture and reusable assets of the university. The decisions regarding the utilization of the funds should be taken by the Green Cell. Proactive efforts should be taken by the university to find funds through CSR collaborations or through different government projects for more investment in infrastructures that would lead to the university becoming more sustainable in the long run.

A nominal amount can be collected from students as Students Chapter Membership Fee. The amount collected will be contributed to the Environment Management Fund.

Some of the key areas that the Green & Sustainability Cell will be addressing in adherence to the Green Policy guidelines are given below.

Energy management

- The University will try and meet its energy needs by using local and renewable energy sources.
- Reduce electricity consumption -Awareness should be given to the staff and students regarding the energy wastage.
- In 2020- 21 the dependence on solar energy should be increased. For this, the university should explore the possibilities of obtaining CSR funds. University has large roof top area which could be fitted with solar energy panels. University should thrive to become completely self-reliant for its energy requirements.
- In hostels solar heating technology can be used to boil water for various cooking purposes.
- As an academic input for better energy management, interdisciplinary curriculum in human ecology could be introduced. This will prepare students to become advocates for the ecological integrity of the climate of the planet and give them tools to influence change in their chosen professions and communities.

Waste Management

- Building up a system –though university has implemented Green Protocol and started segregation of wastes, it has still not become fully functional. Efforts should be taken for building up a fully functional system for waste management which should rest on the principles of reduce, reuse, repair, redesign, replenish, refuse, reconsider and recycle.
 - Awareness should be given to the entire university community on waste management and waste segregation.
 - Waste auditing: wastes generated by the university should be audited to ascertain the source, type and amount of waste generated in a year. The yearly action
 - Plans should address ways to reduce this waste.
 - The cleaning staff should be authorized to report the increase or decrease in the
 - Waste generated by each department and the departments who are able to demonstrate reduction in their levels of waste produced should be honoured.
 - The system for waste segregation and storing should be put firmly in place. Segregation shed should be reorganized into different chambers for storing plastic wastes, e- wastes and other non –bio degradable wastes, which could be sold to the vendors during periodic intervals.
 - A panel of vendors, including those who are capable of managing e-waste should be contacted and their periodic removal should be ensured.
 - The departments could be approached to find out possibilities of creating works of art from the waste generated from within the university like, installations,

gardens which would ensure the up-cycling of solid wastes. Departments will be awarded for such activities or initiatives.

- Start reducing the paper wastes through relying more on electronic devices at all levels including governance, examinations, admission, finance etc., e-governance should be ensured.
- Bio-gas plants established at the canteen and university hostel premises should be well maintained. The staff who is managing those plants should be given training about its maintenance. The capacity to create gas from degradable wastes should be explored fully and used in the canteen or hostels.
- Thumburmuzzhi Model Aerobic composting pit could be constructed to manage the biodegradable waste that could not be put into bio gas plants.
- Incinerators should be installed into all women's toilets and properly maintained. The female students should be given awareness on the use of alternative eco-friendly ways of managing menstruation.

Water Management

The geographic location of the university provides it with unique opportunities and constraints. Being situated near costal ecosystem where the flood water level is moderate means enough water during the monsoon seasons, presence of rich costal ecosystem, but with possibilities of flooding and contamination of the existing water sources. At the same time the university faces water shortage during the summer season. The water management policy of the university should reflect these dilemmas.

- Rainwater harvesting – the buildings constructed in the university should be provided with rain water harvesting facilities and after proper filtration the rain water could be utilized for ground water recharging and could be stored in shallow ponds. Decentralized storage should be attempted for a university like ours where large underground storage tanks would become impractical.
- Drainage map of the university should be prepared which would be basis for watershed management and landscaping.
- Awareness campaigns on reducing the water wastage in the university.
- Waste water generated by the university should be calculated and treatment plants should be installed. As a beginning, temporary waste water treatment ponds could be constructed for treating grey water, which could be used for gardening purposes.
- Toilet waste treatment plants should be there in the long terms plans of the university. The presently used concrete toilet pits are unsustainable in this geography and any crack in this construction would lead to the contamination of fresh water sources leading to serious health hazards for the students and staff.
- The water bodies within the campus and the ecosystem around them should be protected. Nets could be installed over the water bodies to avoid falling of dead leaves.

Ensuring Bio Diversity

- Establishment of sanctuaries for bio-diversity conservation.

- Conducting Bio- Blitz for mapping the bio diversity within the university campus to ascertain the decline or increase in the species within the campus. This should also lead to steps for protecting such species.
- Green cover area of the campus shall be maintained and increased in this year by at least 20%. While increasing green area, native species of flora suitable for this ecosystem should be given importance. The sides of the roads should be planted with trees and especially native fruit trees which would delight the students in future.
- Miyawaki technique could be applied to increase biodiversity in limited space which could be the green lungs of the campus.

Other measures

- Transportation – staff and students should be advised to use public transport system and vehicle pooling to commute to the campus. For movement within the campus, Staff & Students should be advised to commute by walking or cycling or use electric vehicles.
- Walking pathways and seats at different locations within the campus so that students are open to the effects of environment in their daily interaction.
- No vehicle except for cycles and e-vehicle within the campus.
- Mosquito traps and regular inspection of mosquito breeding areas need to be carried out.

Green & Rural Economy

A green economy is an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. It is closely related with ecological economics, but has a more politically applied focus.

In order to encourage green economy, Green Cell of C. V. Raman Global University will recognise and facilitate any kind of development work or start-up successfully carried out by our staff, students or alumni.

(Note: Details to be discussed and finalised)

Convener

Green and Sustainability Cell,
C. V. Raman Global University, Odisha, India

*Subrat
2 March 2020*