



SIR C R REDDY COLLEGE ELURU, W.G.District, A.P.

Green Policy

1. Preamble

Sir CR Reddy College, is committed to protect and conserve the environment by adopting a stringent green policy in accordance with the National Environment Policy. It constantly endeavours to maintain an eco-friendly green campus and inculcate the idea of sustainable development in the minds of youth and train them in the management of renewable and nonrenewable resources and waste for a safe and healthy environment for the present and future generations.

2. Scope

All the stakeholders of Sir CR Reddy College, Autonomous- Management, staff, students and those who use the campus shall adhere to the green policy and code stated herein.

3. Committees, Composition, Roles and Responsibilities

3.1 Composition of Institutional Green Committee

- i. Principal (ex-officio Chairman)
- ii. Vice Principal (ex- officio Chairman)
- iii. Office Superintendent
- iv. Convener - Infrastructure Development (ex-officio Chairman)
- v. (Senior Faculty Nominee)
- vi. Members (Faculty Member Nominees)
- vii. External member (Industry Nominee)
- viii. Student Coordinators

3.2 Role and Responsibilities

- i) The institutional Green Committee shall perform the role of overall planning, executing and monitoring of the ecofriendly initiatives of the institution. ii) Promote environmental consciousness and sustainability among stake holders and the neighborhood community
- iii) Identification and implementation of alternative sources of energy and energy conservation measures
- iv) Implementation of effective waste management mechanisms to minimize pollution
- v) Identification and implementation of water conservation measures vi) Undertake and monitor green initiatives in the campus
- vii) Review and implement the suggestions arising out of Green Audit

4 Energy Management Policy

It is imperative that the members of the institution strive to conserve energy and use alternative sources of energy in order to protect the environment for the present and future generations. Keeping this in mind, the following alternative energy sources have to be harnessed for environmental sustainability.

4.1 Solar Energy

Solar energy shall be harnessed through Solar Roof Top PV Systems, ensuring generation of maximum electricity abiding by the guidelines of Commission of Alternate Sources of Energy (CASE) under the Ministry of New and Renewable Energy (MNRE), Government of India.

4.2 Biogas

The Institution shall probe the feasibility of biogas as an alternative source of energy and install biogas plant.

4.3 Sensor Based Energy Conservation

Implementation of smart technology to conserve energy in the form of using sensor based mecha for lights, fans and other equipment which utilize minimum electricity to be used in an extensive manner.

4.4 Power Efficiency

To ensure power efficiency, all new con shall be planned to operate with a lighting and adequate cross ventilation to avoid artificial lighting and cling Fe power consumption in the campus, the college shall cously identify power office equipment at the time of geocare.

4.4.1 Usage of LED Lights

As an energy efficient institution, all new constructions shall be equipped with LED bulb. The existing lighting facilities in classrooms, laboratories, auditoria, halls and corridors shall be replaced with LED bulbs

4.4.2 Usage of Power Efficient Equipment

As an institutional best practice, only star rated equipment-refrigerator, air conditioners, microwave, deep freezers, etc. shall be procured. The computer labs, staff rooms and offices shall utilize LED monitors. Moreover, the existing TFT monitors shall be phased out gradually.

5. Waste Management Policy

One of the key focus areas of the green policy is systematic waste management. "The institution endeavours to comply with waste management legislations, reduce waste generated in the campan reduce environmental impact through segregation, reuse,

recycling and composting of waste AU the stake holders of the institution are oriented about the importance of a clean green campus through orientations, circulars and notices in prominent places In addition to this, there shall be a systematic mechanism for solid and liquid waste segregation, characterization, minimization, collection, separation, treatment and disposal.

5.1 Management of Biodegradable Waste

- 5.1.1. Institution shall adopt composting methods and the compost generated from this will be used as bio-fertilizer for nurturing the flora in the campus. Besides this. the institution shall also look into the possibility of generating biogas from biodegradable waste.
- 5.1.2 The institution shall have a systematic mechanism for reducing, recycling and reusing non-biodegradable waste to minimize environmental pollution

5.2 Solid Waste Management

The solid waste management practices of the institution shall follow the guidelines of the International Institute of Waste Management. A structured, systematic and multi-level solid waste management process has to be implemented by following the norms below:

- i. Waste segregation and collection at every level of the organisation has to be done through colour coded and labelled bins have to be placed in the classrooms, auditoria, cafeteria, laboratories, corridors, wash rooms, quadrangle and parks.
- ii. Exclusive support staff should be appointed for waste collection, segregation, treatment or disposal.
- iii. The paper waste collected shall be sent to an authorised recycling unit.
- iv. The plastic and glass waste should be given to Corporation authorised plastic waste collection Corporation centres.
- v. Wet waste shall be treated through vermicomposting and resulting vermicompost to be used as bio fertilizer.
- vi. Incinerators shall be used to dispose needles, sharps and sanitary napkins.

5.3 Liquid Waste Management

The institution shall have a sewage treatment plant to recycle liquid waste, and the toxic liquid waste from the laboratories should be rendered non-toxic using methods as bioremediation & phytoremediation.

5.4 Biomedical Waste Management

Institution should manage biomedical waste of laboratory origin with utmost care and shall be disposed in a manner to contain potential infection and to protect the environment. The following norms will be implemented for the management of biomedical waste.

- i. Laboratories shall display biosafety protocols for safe handling and disposal of biomedical waste.

- ii. Biomedical waste, other than sharps, should be collected in strong containers (labeled red) that prevent breakage.
- iii. Discarded sharps should be collected in separate boxes.
- iv. Only trained laboratory personnel are authorized to handle biomedical waste with standard precautions.
- v. The segregated biomedical waste should not be stored beyond the standard time limit.
- vi. Biomedical waste should be incinerated or autoclaved or treated with disinfectants to prevent any environmental hazards.

5.5 E-Waste Management

The IT maintenance department is responsible for e-waste management. A structured plan of e waste management shall be devised at the procurement stage itself. The following norms will be implemented for e-waste management.

- i. An MoU shall be signed with an authorized e-vendor for the timely collection and recycling of e-waste.
- ii. The maintenance department shall make arrangements for the annual collection and disposal of the e-waste.
- iii. Obsolete equipment shall be used for learning the hardware component.

5.6 Hazardous Chemicals and Radioactive Waste Management

Institution shall implement effective mechanisms to prevent ignitability, corrosively, reactivity and toxicity of hazardous and radioactive waste. The following norms will be implemented for this.

- i. Laboratories shall display protocols for safe handling and disposal of hazardous waste.
- ii. Hazardous waste should be collected in strong containers (labeled red) that prevent breakage.
- iii. Radioactive waste should be collected in labeled protective containers specifically designed to hold radioactive waste.
- iv. Only trained laboratory personnel should be allowed to handle hazardous and radioactive waste with standard precautions and in a radioactivity prevention chamber.
- v. The segregated hazardous waste should not be stored beyond the standard time limit.
- vi. Hazardous biological waste should be autoclaved and disposed following institutional biosafety guidelines.
- vii. Hazardous chemical waste should be neutralized diluted and disposed through separate piping leading to separate collection tanks outside the building
- viii. Radioactive waste should be disposed following standard biosafety guidelines given in Safe Disposal of Radioactive Waste Rules, 1987 of the Department of Atomic Energy

6. Waste Recycling System

Institution shall have a waste recycling mechanism that will enable the reuse of potentially useful material and reduce the consumption of additional raw material, this will in turn conserve energy and reduce pollution.

6.1 Solid Waste Recycling System

The following norms will be implemented for recycling solid waste

- i. Major points of paper waste generation have to be identified, collected and sent to the authorized paper recycling unit.
- ii. Major points of plastic waste generation have to be identified, collected and sent to authorized plastic recycling units
- iii. The institution shall not use thermocol for any purpose
- iv. Metal scrap shall be recycled through authorized vendors
- v. Wood scrap shall be recycled into new furniture.
- vi. Reusable construction waste has to be recycled.

6.2 Liquid Waste Recycling

The following norms will be implemented for recycling liquid waste

- i. The sewage water generated shall be recycled after treatment in a sewage treatment facility.
- ii. There should be a provision to harvest and reuse rain water.
- iii. The water generated as waste during purification of water from Reverse Osmosis Units shall be recycled and used.

7. Water Conservation

The institution shall strive to conserve water and recycle the used water. Towards this end, a systematic, well-planned, structured mechanism shall be implemented to conserve water in all forms.

7.1 Rain Water Harvesting

The following norms will be implemented for rain water harvesting:

- i. The rain water shall fulfill a substantial requirement of water usage in the campus.
- ii. The water from annual rainfall should be collected to the maximum.
- iii. A well formulated scientific mechanism of collecting, filtering and storing harvested water shall be planned and executed.
- iv. Exclusive rainwater storage tanks shall be constructed and shall serve as secondary source of water.

7.2 Bore well/Open Well Recharge

The bore wells shall be drilled only when necessary, and the existing bore wells shall be replenished by constructing recharge pits.

7.3 Construction of Tanks and Bunds

Institution shall construct additional storage tank/bund to store excess water that can be rechanneled during heavy rains.

7.4 Maintenance of Water Bodies and Distribution System

Institution shall effectively maintain and protect water bodies present in the campus, and shall install a proper distribution system for the usage of the stored water.

8 Green Campus

The institution should take initiatives to foster a culture of environment consciousness and sustainability among its stakeholders, and should maintain an environment friendly campus with adequate measure and practices.

8.1 Green Campus Certification

The institution shall have a long term commitment to continuous environmental improvement from the campus community. It shall strive to meet national benchmarks in environment protection and obtain green certification.

8.2 Restricted Entry of Automobiles

Institution shall restrict vehicular entry to a minimum in campus area to reduce pollution, and majority of areas of the campus shall be accessible by foot, bicycles or e-vehicles.

8.3 Usage of Bicycles

Members of the institution shall be encouraged to use bicycles for commuting.

- 8.4 Usage of Battery-Powered Vehicles (Electric Vehicles)** Institution shall encourage its members to use electric vehicles for commuting. Transportation within the campus shall be provided through e-vehicles to reduce carbon emission. A charging point shall be set up for the convenience of recharging electric vehicles. The e-vehicles of the institution shall also meet the transportation needs of divyangjan students and guests.

8.5 Pedestrian Friendly Pathways

There shall be exclusive pathways for pedestrians with restriction on vehicular entry for safe movement. Signs shall indicate pathways for pedestrians and vehicles, respectively. The pedestrian pathways shall be maintained with green coverage.

8.6 Ban on Plastic Usage

The institution shall follow "zero single use plastic usage" policy in all the campus facilities. Efforts shall be made to curb the usage of other forms of plastic of less than 50 microns. Tangible alternatives shall be sought to single use disposable plastics from the concept of reuse to compostable products.

8.7 Landscaping with Trees and Plants

There shall be campus landscape design and maintenance plan as a part of the institutional strategic plan that contributes to pollution free campus ecosystem. Adequate attention shall be given to develop lawns and parks and there shall be no compromise on green space during infrastructural development. Documentation of flora shall be maintained. A separate space shall be allocated for herbal garden for ornamental and functional purposes.

- 8.8** Clean and Green campus Institution shall take conscientious effort to make members aware about the significance of clean and green campus. There shall be a campus manager to monitor the cleanliness of the campus, and adequate manpower shall be recruited for the upkeep and cleanliness. Moreover, efforts shall be made to adopt green cleaning practices.

9. Quality Audit

Utilizing the national benchmarks of green campuses, the institution shall have an internal mechanism for auditing green and sustainability initiatives.

9.1 Quality Audit - Green campus

Green audit shall be carried out to improve the environmental condition of the institution. An audit of implementation and effectiveness of green practices has to be done annually. The incremental green coverage of the campus shall also be assessed. This audit shall be carried out to measure institutional practices such as waste management, energy saving practices and water management.

9.2 Quality Audit- Environment

Environment audit shall measure the effects of institutional practices and activities on the environment related to five categories: i) Air issues ii) Water issues iii) Waste iv) Biodiversity and v) Environmental Management System. A systematic audit shall be conducted once a year to improve the institutional ecosystem and reduce adverse environmental effects.

9.3 Quality Audit- Energy

The energy audit shall identify, measure and report energy utilization, energy conservation and power efficiency in the institution. shall be used to understand patterns and areas of energy consumption for improvement of energy saving measures.

10 Green Practices in Academic and Administrative Processes

The institution is responsible for protecting the environment by introducing green and sustainable practices in all academic and administrative processes. The following avenues of healthy practices shall be pursued:

- i. The administrative sections shall gradually move towards paperless operations through an e governance mechanism.
- ii. Online communications to be encouraged at all levels using the official e-mail, internal servers and webpage.
- iii. Online payments and fee transactions shall be promoted.
- iv. Online admission process shall be adopted for all programmes. v. E-verification of certificates and documents for students and alumni shall be initiated.
- vi. Establish a data centre for faculty, student and cloud based education management.
- vii. Component of online based examination shall be increased gradually.
- viii. In house learning management system shall be set up to promote online and blended learning.
- ix. The college shall reduce paper and printing costs by publishing e-handbook, e-prospectus, e-journals and e-magazines.
- x. E certification shall be considered for conferences, workshops, FDPs, value added courses, curricular festivals, cultural and sports activities.
- xi. Students and staff shall be encouraged to register and use National Academic Depository.

11 . Environment Promotional Activities Beyond Campus The institution has a social responsibility to display sensitivity to issues like climate change and global warming. It is responsible for spreading environmental consciousness in the neighborhood community. The conservation and protection of the environment is the cooperative effort of the institution and local community. The following environment promotional activities shall be undertaken beyond the campus:

- i. Awareness campaigns on protection of biodiversity, environment, water bodies
- ii. Awareness campaigns on energy and water conservation, alternative sources of energy, waste management and zero use of plastic
- iii. Participate in government schemes on environmental protection
- iv. Initiate environmental promotion activities in adopted Linnat Bharat Abhiyan villages
- v. Promote UN Sustainable Development Goals in the neighborhood.

PRINCIPAL