

POLICY DOCUMENTS

A NAAC- IQAC Initiative



SANKETIKA VIDYA PARISHAD ENGINEERING COLLEGE

(Approved by the AICTE Newdelhi and affiliated to the Andhra University)

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ENERGY POLICY

Preamble

Energy is now a vital part of everyday life. As per the Environment Policy 2020 of AICTE, that sets long term goals for educational institutes to conserve natural environment, develop sustainable solutions and control energy consumption, an educational institution has to evolve programs and policies that turns the institute into a carbon-negative institute and promote in educating students and employees on environmental concerns and sustainability, be responsive to the emerging challenges in the Energy sector and Sustainable development of the State and Country. So, it is essential for the educational community to practice sustainable energy that will provide favorable effect on the eco-system.

The Energy Policy of the Institution will thus be effective in organizing structured programs to promote awareness on the proper management and conservation of energy those models resource-efficient and low-carbon campuses that demonstrate practice for sustainability.

Features in the Campus:

1. APEPDCL fed 11 KV Substation.
2. Grid connected Solar Plant
3. Sensor based Energy Conservation
4. 100% Power Backup – DG Set and Solar Plant
5. LED Light fixtures.
6. Repair, Re-use and frequent maintenance of equipment to ensure sustainable longevity.
7. Effective maintenances through annual maintenance. Contracts to increase reliability.

1. Energy Policy Statement

The SVPEC energy policy articulates commitment of the Institution to the conservation of energy by defining energy management protocol for thermal and electrical energy systems of the institution, focusing on sustainable practices in reducing carbon footprint and other environmental impacts as per the norms of Energy Conservation and Management, for maintaining an eco- friendly green campus.

2. Objectives

- Utilize energy resources efficiently by introducing innovative technologies
- Use of renewable energy.
- Optimize the Energy consumption and cost.
- Reduce, Reuse and Recycle.
- Carry out regular internal energy audits to identify energy conservation opportunities.
- Regular monitoring and follow up procedures managed by the Institution Energy Audit/Management Cell for effective implementation at department levels.
- Training faculty for non-teaching staff, students and housekeeping staff to make the

Institute a role model in the area of Energy conservation.

- Encourage faculty members to obtain certification as Certified Energy Auditors and Managers.
- Establish ties with Industries and conduct a complete Energy Audit.
- Promote awareness related with Energy conservation among various sections of society.
- Review the Policy on a regular basis.

3. Responsibilities and Roles

The Energy Management Team comprises of:

- (i) Bursar
- (ii) Principal
- (iii) NAAC Coordinators
- (iv) Criteria 7 Coordinators from all Departments
- (v) Faculty familiar with Energy auditing
- (vi) Technical Staff
- (vii) Advisory team from the collaborations like EMC empanelled Audit Firms for Expert advice.

The team should carry out the action plan and ensure the energy resources are made available and utilized optimally.

4. Action Plan

Energy Optimization Plan

1. Restructuring the Energy Management Cell with representatives from all Departments, for effective implementation of Energy management program.
2. Regular Monitoring and benchmarking resource use and waste generation.
3. Monitor and evaluate the energy performance levels
4. Setting short term and long term targets and conservation strategies, to achieve and surpass goals for zero-carbon Campus.
5. Use of energy efficient, star labeled equipment.
6. Periodic maintenance and replacement of other lights/lighting fixtures to LED.
7. Maintaining a sustainable approach by use of existing equipment efficiently till its lifecycle ends, and replacing with more efficient equipment when necessary.
8. Reduce e-waste to maximum with proper maintenance, before moving on to Replace & Recycle stage.
9. Maximum use of Daylight for Indoor illumination and natural ventilation.
10. Fine tuning of optimum temperature setting of Air Conditioners and Water coolers.
11. Maximize use of Renewable Energy – Grid Interactive Solar PV System installed in the Campus.
12. Maximum demand optimization by adequate reactive power management
13. Encourage students to undertake UG and PG projects on Energy Management, Energy optimization techniques, Renewable Energy Harvesting thereby promoting a sense of

awareness towards Energy use and its cost.

14. Provide training for faculty and students about Energy Management, Energy Auditing.
15. Include Project learning strategies for Energy Conservation and Energy management courses in the curriculum in tie up with Industries.

5. Mechanism of Action Plan

The Energy Management Cell should lay down well-defined procedures as mentioned below, that follows the indicated stages.

- i. Create Energy Baseline Assessment
- ii. Define the Energy Agenda of the Academic year
- iii. Create Implementation guidelines
- iv. Review: Monitoring and follow-up

A worksheet or checklist to be maintained for the Energy Management Action Plan so as to meet the short term and long-term goals.

WASTE MANAGEMENT POLICY

Preamble

The educational institutions represent the main components of sustainability promotion in our society. Waste Management is one of the challenges that educational institutions have to face in accomplishing the sustainability goals. In 2016 the Union Ministry of Environment, Forests and Climate Change (MoEF&CC) released the updated Solid Waste Management (SWM) Rules which applies to every Solid Waste generator contributing to Waste generation in the premises. In recent years, technologies have been developed that not only help in generating substantial quantities of decentralized energy but also in reducing the quantity of Waste for its safe disposal.

Features in the Campus:

1. Material recovery facility and Incinerator.
2. Paper recycling and reuse by converting to Notepads.
3. Repair, Re-use and frequent maintenance of equipment to ensure sustainable longevity.
4. Waste Segregation using Colour Bins
5. Cast iron recycling for the scrap iron.
6. E Waste Recycling and management.
7. Student Projects on Waste management
8. Awareness programs for Waste management through Swacha Mission, from different NGO's

1. Waste Management Policy Statement

The SVPEC Waste Management Policy articulates commitment to reducing its environmental impacts through effective Waste Management and sustainable practices in converting Waste to resource. The Campus strives to work for obtaining a Zero Waste plan thus obtaining its Eco-friendly status through the policy of “reduce, reuse and recycle”.

Objectives

- Minimizing the consumption of natural resources.
- Avoiding and minimizing the generation of Waste.
- Reducing, re-using, recycling and recovering Waste.
- Ensure segregation of Waste at the source
- Treating and safely disposing of Waste to reduce the pollution.
- Promoting and ensuring the effective delivery of Waste services.
- Achieving integrated Waste Management reporting and planning.
- Ensure that the stakeholders are aware of the impact of Waste on their health, wellbeing and the environment through Awareness programs
- Increase consumer awareness of Waste minimization issues
- Ensure the protection of the environment through effective Waste Management measures.
- Carry out regular internal Waste Managing Audits to continuous monitoring of various Waste management systems in the college.
- Regular monitoring and follow up procedures managed by the Institution Waste

Management Cell for effective implementation at department levels.

- Trained faculty, non-teaching staff, and students and housekeeping staff to make the Institute a role model in the area of management of the various types of degradable and non degradable waste.
- Promote Collaborations with Govt. Bodies/Industries/NGOs to promote sustainable practices in the Campus
- Review the Policy on a regular basis.
- Bench mark the Campus using the green norms.
- E-waste from labs is properly collected and is given to the licensed recycler, reused wherever possible, donated and sold if possible.
- Non-working computers, monitors and printers are discarded and scrapped on a systematic basis.
- E-waste collected from labs is reused and recycled to the maximum.

2. Responsibilities and Roles

The Waste Management Team comprises of:

- (i) Bursar
- (ii) Principal
- (iii) NAAC Coordinators
- (iv) 1 Coordinator and Faculty Representatives from all Departments
- (v) NSS Committee and Faculty Coordination Members
- (vi) 1 Technical Staff member from each Department
- (vii) Housekeeping Staff Coordinator
- (viii) Advisory team from the associated professional bodies/clubs.

The team should carry out the action plan and ensure the Waste Management strategy is organized and implemented optimally.

3. Action Plan

Waste Management Plan

1. Constitute the Waste Management Cell with representatives from all Departments, for effective implementation.
2. Regular Monitoring and benchmarking resource use and Waste generation.
3. Quantify, Monitor and Evaluate the Waste generation, disposal and collection system in the Campus, regularly.
4. Setting short term and long term targets and conservation strategies pertaining to the unsustainable Goals.
5. Initiate sustainable practices like Composting for Waste, generated from the Canteen.
6. Reduce e-waste to maximum with proper maintenance, before moving on to Replace & Recycle stage.
7. Continue to introduce innovative strategies to reduce paper Waste and plastic Waste in the Campus
8. Ensure effective disposal methods for Laboratory and Hazardous Wastes generated in the campus.
9. Provide training for faculty, students and staff about Waste Management and practicing

Sustainable habits.

10. Include Sustainable Project learning strategies for Waste Management in the curriculum with Industry tie up.

5. Mechanism of Action Plan

The Waste Management Cell should lay down well-defined procedures as mentioned below, that follows the indicated stages.

- i. Define the Sustainable Goal Agenda of the Academic year pertaining to Waste Management
- ii. Create Implementation guidelines
- iii. Review: Monitoring and follow-up

WATER MANAGEMENT POLICY

STATEMENT

Water is the fundamental requirement of life. It touches all life activities such as agriculture, domestic and all socio-economic activities. The water management policy of SVPEC includes all the water related field activities. There are more than seven water conservation systems available

in the campus which supplies drinking water to a large academic community of the entire Institutions at Sri Srinivasa Vidya Parishad, P.M.Palem. A water management policy is required to assure the quality of water distributed from the unique sources of water conservation system at SVPEC.

OBJECTIVES

- To provide adequate water supplies to meet demands of the campus.
- To provide clean, safe, reliable drinking water at all times.
- To increase water availability through recycling.
- To enable water storage and propose conjunctive management of surface and groundwater
- To provide for groundwater recharge while protecting groundwater resources from overdraft
- To protect the groundwater resources from contamination
- To control excessive erosion and manage sedimentation/ situation
- Rain water harvesting pits are located at the institution to improve the ground water table
- To protect, restore, and rehabilitate watershed and bay processes
- To protect, restore and rehabilitate the habitat for species protection
- To undertake activities to sensitize people about Climate change.
- Increase water resources related recreational opportunities

PROCEDURE

1. A team is formed to create and implement the water management policy in the SVPEC campus. The team should visually inspect all the water conservation system in the campus periodically. This team ensures primarily on the regular monitoring of quality of drinking water, maintenance of water distribution system and effective utilization of the waste water.
2. The water demand, wastage of water and the quantity of the water in the reservoirs should be quantified periodically

3. The layout of water distribution system should be developed. This map will help the team to identify potential hazard condition of the water distribution system. The up-to-date plumbing drawings should be available to assess the performance of plumbing components.
4. New technologies should be developed to protect and restore the water in the reservoirs and to improve the facilities for ground water recharging and waste water recycling. Various information is to be collected from the experts who is working in the area of water conservation system. The collected information should be presented in the meeting and it should open for discussions.
5. Productive and efficient methods should be implemented to improve the reservoir capacity and drinking water quality and these methods should be monitored and the efficiency should be evaluated.
6. The standard operating procedures should be developed and documented

ROLES

The Water Management Team comprises of

- (i) Bursar
- (ii) Principal
- (iii) NAAC Coordinators
- (iv) Faculty Coordinators from all Departments
- (v) Interested Faculties and Technical Staff of SVPEC
- (vi) Plumbing Supervisor of SVPEC
- (vii) Advisory team which includes the experts of water resource engineering from various prestigious organizations and national water mission.

RESPONSIBILITIES

1. Conduct meeting regularly and review the policy
2. Update the maintenance register
3. Conduct the water audit
4. Monitor the water levels of all conservation system
5. Verify the water quality periodically
6. Measures to be taken to improve the water quality
7. Quantify the water demand and wastage of water of all the institutions.
8. Review of project proposals in the area of water conservation system or waste water recycling which would be beneficial for preserving the water management in the SVPEC campus.

Conduct workshops and seminars for providing the awareness for saving the natural resource and reduce the wastage of water to students and public.

Green Campus Policy

Objectives:

1. To combine environmental friendly practices and education to promote sustainable and ecofriendly practices in SANKETIKA VIDYA PARISHAD ENGINEERING COLLEGE campus
2. To redefine environmental culture in SANKETIKA VIDYA PARISHAD ENGINEERING COLLEGE campus and develop new paradigms by creating sustainable solutions to environmental, social and economic needs of the mankind to reduce the carbon foot print
3. To Sweep away wasteful inefficiencies in all activities @ SANKETIKA VIDYA PARISHAD ENGINEERING COLLEGE, use renewable resources and promote the 5-R principle (Reduce-Reuse-Recycle-Recover-Refuse) of waste management

Action Plan and Implementation:

Following are some of the several strategies and actions to realize the objectives of Green campus at SANKETIKA VIDYA PARISHAD ENGINEERING COLLEGE.

1. Using renewable energy resources such as Solar power, partially replacing conventional non-renewable energy.
2. Implenting power saving methods/ techniques such as use of environment-friendly electrical appliances, replacement of flourescent bulbs by LED bulbs etc. to save energy and reduce wasteful inefficiencies
3. Sensitizing faculty, staff and students to switching of lights, fans, computers and other electrical appliances when not in use or when not needed
4. Adopting -governance practices leading to minimizing the use of paper as well as utilizing one-side papers
5. Banning single use plastic and minimizing plastic usage on the campus.
6. Promoting student projects on waste minimization and reuse and recycling of waste
7. Adopting Buy back policy (buy back old/outdated computers/ electronic systems) for purchase of new computers/electronic systems
8. Inventory and disposal of electronic products used in the campus and planning recycling
9. Segregating dry waste and wet waste for safe disposal of waste generated in the campus
10. Using common sewage treatment plant to treat the waste water generated in the Institute and its maintenance.
11. Enhancing the green cover in the campus and Promoting one plant one person program every semester by students, faculty and staff to increase green cover and reduce carbon footprint in the region

12. Promoting use of public / college transport system by staff and students, as well as vehicle pooling and use of bicycles in the campus
13. Repairing leaky taps to prevent wastage of water
14. Recycling waste water from RO plant to washrooms
15. Installing sprinklers for watering the campus lawns to save water.
16. Using and strengthening Rain water harvesting system in the campus
17. Campaigning for not wasting food in the canteen and also Utilizing the unused food every day to feed the needy through MoU with Voluntary organization
18. Awareness programs on solid waste management and conservation of resources and environmental protection
19. Conducting

Annual Green Audit by third party and implementing the recommendations

Green Audit

Green Audit has been conducted to study the Waste management and Green Area management by third party in June 2022. The Audit compiled the list of possible actions to conserve and efficiently access the available scarce resources and their saving potential is also identified. Methods have been recommended for disposal of different types of solid wastes. The Recommendations of the Green Audit are being implemented.

ASSISTIVE POLICY

“Rights of Persons with Disabilities Act, 2016 states that the appropriate Government and the local authorities shall endeavor that all educational institutions funded or recognized by them provide inclusive education to the Children with disabilities and towards that end shall make building, campus and various facilities accessible.”

1. Objectives

Assistive Technology (AT) group at Sanketika Vidya Parishad Engineering College aims at

- Enhancing the lives of the differently abled community and thus ensuring their participation in the society and in educational systems.
- Assisting the differently abled students in the college by helping them overcome the issues with learning, writing, reading and communicating effectively with the help of assistive technology related tools, software support and services, thereby fostering their inclusion and participation in the learning process.
- Providing appropriate training to the staffs in the college on how to support students with special needs and how to use the technology effectively with their students.

2. Who can benefit from Assistive Technology in the college?

- Students and Staff with Disability.
- Students who are slow learners and having issues with memorizing concepts/tasks.
- Aged people / Persons with disabilities attending the workshops/seminars/conferences etc.organized by the college.

3. Policy Statements

- Sanketika Vidya Parishad Engineering College (SVPEC) is against all forms of discrimination, on any grounds, including disability.
- To ensure the inclusion and participation, and for enriching the educational experience of the different abled students, SVPEC ensures equal access to all educational equipments, visual and auditory information provided as a part of the teaching learning process.
- The institute ensures that the differently abled can access/avail the Assistive Technology related support and services provided to them, any time during the college working hours.

4. AT related facilities in the campus

Conveyance facilities

- Wheel chair is available for mobility purposes within the campus.
- Elevator facility is available in SVPEC.

- Ramps for accessibility in the main entrances are available.
- Signage boards are displayed in the institution to direct all the people need clear information about the purpose and layout of the college to maintain a sense of direction and independent use of all facilities

Campus facilities

- Institute ensures that the Classrooms, Laboratories, Library, Canteens, Restrooms etc, are easily accessible to persons with special needs.
- To aid students with hearing impairment, all the important announcements and notifications are displayed on the display boards.

Teaching – Learning facilities

- Institute has adopted Cooperative learning techniques like Think- Pair-Share, Scaffolding, Adaptive learning and other ACL techniques, to help students with learning disabilities and mild cognitive impairments.
- Institute ensures the conduct of remedial classes /special classes to help students with special needs and students who are slow learners.
- Scribe assistance or additional time is provided for writing the exams, on written request. Provision to allot separate rooms, which are easily accessible, by such students, is available.
- An AT group has been formed in the college, which focuses on conveying the importance of technology in enhancing the lives of the differently abled community.
- Recorded sessions of classes with captions, are made available, on request, to the students with learning disabilities.

5. Roles and Responsibilities

The Assistive Technology Team consists of

- Bursar
- Principal
- AT Group Head
- Faculty in AT group
- Technical Staff

The AT team will carry out the action plan and will ensure that equal access is provided to all and that the quality of education is improved by incorporating inclusion in educational system.

6. Action Plan

1. Define strategies to incorporate more inclusiveness in education and to ensure the proper functioning of the AT group.
2. Install more ramps for easy access to the different blocks in the buildings.

3. Allocate space and budget to build toilets for persons with disabilities in each campus block.
4. Provide training to staffs and students, to create awareness and to enable them to effectively communicate with differently abled students.
5. Encourage students to undertake projects related to AT
6. Initiate voice recording of textbooks and study materials to make audio textbooks available to students with visual impairment
7. Incorporate AR and VR based educational tools to enhance the teaching – learning experience
8. Budget allocation for AT group
9. Provision for scholarships encourages differently-abled students to pursue their interest in the field of engineering.

7. Mechanism of Action Plan

The AT group should lay down well-defined procedures as mentioned below, that follows the indicated stages.

- ii. Define the AT-related activities for the Academic year
- iii. Create Implementation guidelines to make the campus more accessible
- iv. Review: Monitoring and follow-up