

Shaping Lives... Empowering Communities...

ENERGY POLICY 2017

Version 1

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT ODISHA

FOREWORD



Through an outcome and value-based education system, the Centurion University of Technology and Management, Odisha (CUTM) has been providing highquality learning environment. CUTM believes in achieving the Sustainable Development Goals (SDGs) which requires a focus on environmental sustainability and energy harvesting.

Energy is acknowledged as a key input towards raising the standard of living of citizens of any country, as is evident from the correlation between per capita electricity consumption and Human Development Index (HDI). Therefore, an energy policy has been developed at university level. The principal focus of this energy policy is to make strategy to meet the objectives.

University focuses on green energy across campuses, reduction in dependability on grid connected utility, and use of smart appliances in every nook and corner. Apart from this the energy policy is aimed to implement energy saving measures with a safe operating environment in all of its constituent campuses. The students and employees of university are being encouraged to follow steps that are stipulated in all facilities to save energy uses.

CUTM mainly focuses on saving energy at each and every aspect. The university has its grid-tied roof top solar energy. The University uses erikshaws for intra-university mobility. The university has also developed a waste to energy system, where all solid waste is converted to biomass energy for utilization, one of the research centres has developed a small scale wind power system, on pilot basis to explore potential of full scale green energy development from wind source. University has already converted its conventional lighting to energy efficient lighting. To add further, all the areas of energy use will be energy efficient by next year.

University is promoting and in future will continue to support innovation related to energy. Therefore, University will become an energy resilient University and will achieve net zero carbon emission.

I appeal to all stakeholders of the University to adhere to this energy policy.

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Prof (Dr) Supriya Pattanayak Vice-chancellor

Centurion University of Technology and Management

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1. Preamble:

The goal of the Energy Policy is to better manage energy use in order to increase productivity while reducing environmental effects. Implementing new energy efficient technology, decreasing energy waste, or enhancing current processes to reduce energy costs are all part of the agenda.

2. Objectives:

The University hereby commits itself for continuous improvement in enhancing energy performance, energy efficiency.

It is also committed to optimize energy consumption and adopt best energy management principles.

The University also uses alternate sources of energy like Solar energy and implements it at all our constituent campuses in terms of utilization while creating awareness and promoting students and making them a part of the engagement and new initiatives.

In addition, it will also adhere to following guiding principles.

- 1. To endeavor for reduction in specific energy consumption in all forms and in all areas of operations.
- 2. To ensure availability of information and necessary resources for achieving objectives and targets.
- 3. To promote and utilize sufficient renewable energy.
- 4. To comply with all relevant legal, regulatory obligations and other statutory guidelines related to energy uses, consumption and efficiency.
- 5. To ensure optimization in energy consumption and minimizing losses by adopting best O&M practices.

- 6. To encourage procurement of energy efficient products, services and adopting the latest available technology to enhance energy performance.
- 7. To create awareness for energy conservation and disseminate information to the grass-root level by conducting training, motivation programs, workshops and seminars.
- 8. To carry out internal and external energy audit and energy review at planned intervals to evaluate energy performance for further improvement.

3. Scope:

- 1. This policy is applicable to Centurion University and all its constituent campuses.
- 2. This Policy is applicable to all employees and students inside the university campus.

4. Specific Measures:

4.1. Buildings

• The energy efficiency of a building is the extent to which the energy consumption per square meter of floor area of the building measures up to established energy consumption benchmarks for that particular type of building under defined climatic conditions.



Bhubaneswar Campus



Paralakhemundi Campus

- Design of buildings, such that there will be natural light into the building premises.
- The class rooms, laboratories, workshops and offices should be properly ventilated, such that natural air circulation will be there.
- The temperature of the rooms should be maintained at 25 to 27 degree celsius, to avoid extra energy consumption.
- Design of new buildings should be as per CPWD Green Rating Manual, 2019. (https://cpwd.gov.in/Publication/Green rating manual april 2019.pdf)
- The HVAC system is arguably the most crucial part of any building, therefore an energy efficient HVAC system should be adopted.

4.2. Electrical Equipment:





Satellite view of Grid Connected Roof Top Solar System

- Automation of the electrical appliances.
- Use of renewable energy as the primary source for running of the equipment.
- Switching off the lights, fans, ACs, water pumps etc. whenever not in use.
- Use of energy efficient electrical appliances.
- All appliances must be properly electrically grounded. And Earth resistance of all the building premises must be maintained.
- Use of automated solar street lights.



400W Wind Power Plant

4.3. Green Campus:



Green Campus



E-vehicles inside campus

- To increase the rate of recycling of all appropriate materials, based on life-cycle principles.
- Water leaks, dripping faucets and fixtures that do not shut off should be reported.
- Installing waste water treatment plant and use of treatment waste water for gardening and other necessary cleaning work
- Measures for rain water harvesting
- Taking measures for achieving Zero use of single use plastic.
- Use of electric vehicles inside campus is encouraged. employees are also encouraged to walk and cycle.



600Watt Solar Tree

4.4. Canteen and Hostels:



Compost Unit

- Use of solar thermal for cooking and water heating.
- Use of food waste for making organic fertilizers.
- Use of pellet chulhas for cooking.

4.5. Awareness and Training:





Awareness and Training

Awareness program by PCRA

- To communicate internally and externally the university's energy policy and performance.
- To raise awareness among the staff and students of the College's energy and environmental impact, activities and performance and good practice.
- To provide appropriate energy conservation educational programs for staff and students.
- To encourage and facilitate feedback and suggestions on ensuring good practice.

5. Energy Management Cell:

The core responsibility of the Energy Management cell is to supervise the regular affairs of energy saving measures. The committee members periodically meet to review the development of green-energy usage and decreasing the wastages of the energy. Besides this, the committee pass directives on adhering the clauses of energy policy as when required.

The committee constitutes following member:

- Prof. Jagannath Padhi, Director, CUTM, Bhubaneswar campus
- Prof. Rajesh Kumar Padhi, Director, CUTM, Rayagada Campus
- Prof. Pradeep Kumar Sarangi, Director, CUTM, Balangir Campus

- Dr. S.P. Nanda, Professor (School of Applied Science) & Dean (Administration), CUTM, Paralakhemundi Campus
- Prof. K.V.D. Prakash, Dean (HRD), CUTM
- Prof. Asish Ranjan Dash, Dean(Academics), CUTM, Paralakhemundi Campus
- Mr. Chittaranjan Pattanayak, Sr. G.M. (HR and Admin), CUTM
- Prof. Surya Narayan Sahu, Assistant Professor, Dept. of EEE, CUTM, Bhubaneswar campus

6. Approval and Review:

Energy policy reviewed once in three years or as and when required. The Vice-Chancellor of the University is the custodian of the policy.

Anita Patra

Dr. Anita Patra Registrar Centurion University of Technology and Management

> REGISTRAR Centurion University of Technology & Management ODISHA



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA

CAMPUSES:

Paralakhemundi Campus Village Alluri Nagar P.O. – R Sitapur, Via- Uppalada Paralakhemundi, Dist.- Gajapati Odisha, India. PIN– 761211 **Bhubaneswar Campus** Ramchandrapur P.O. – Jatni, Bhubaneswar Dist.- Khurda, Odisha, India, PIN– 752050 Balangir Campus Behind BSNL Office IDCO land, Rajib Nagar Dist.- Balangir, Odisha India, PIN-767001 Rayagada Campus IDCO Industrial Area Pitamahal, Rayagada Dist.-Rayagada, Odisha India, PIN-765001

Balasore Campus Gopalpur, P.O.-Balasore Dist.-Balasore, Odisha India, PIN-756044

Chatrapur Campus Ramchandrapur, Kaliabali Chhak, P.O-Chatrapur, Dist.-Ganjam Odisha, India, PIN-761020