ENERGY POLICY OF K. K. WAGH ARTS, COMMERCE, SCIENCE AND COMPUTER SCIENCE COLLEGE, SARASWATI NAGAR, NASHIK



Energy plays important role in the Development of Nation as well organization. Energy requirement is linked with GDP development. Out of various costs Energy cost is one of major cost .Energy intensity is Energy requirement per GDP .Energy intensity of our country is 3.7 times of Japan. 1.55 times of USA, 1.47 times of Asia and 1.5 times of world average Energy intensity indicates development stage of country and Efficiency of Energy Use Our country is not Energy secure country and energy requirement is met through import of coal and petroleum product. Around 70% of countries Energy requirement is met through Electricity generation using thermal power plants .Use of fossil fuels leads to environmental pollution .Energy conservation 200 I was enacted to improve Energy efficiency and reduce Energy intensity .For sustainable development it is necessary to provide focus on Energy. Environment and Ecology .Energy Management is Judicious and Effective use of Energy without curtailing requirement to maximize profit and minimize Environmental degradation .There is substantial potential to conserve Energy by implementation of Energy Management Program in all sectors of Economy. Energy conservation awareness at all level is important to engage. involve all stake holders in Energy Management program .Senior colleges can play significant role in creating awareness about Energy management program among students. Energy Audit is one of the important tool to identify Energy conservation potential. Energy Audit would give positive orientation about Energy cost reduction .Energy audit is translation of Energy conservation into realities taking into consideration techno commercial aspects.

Objectives of Energy Management:

- Improvement in Energy efficiency to reduce Energy consumption and cost,
- Eliminate wastages by use of good housekeeping practices.
- Minimize Environmental degradation

Energy Management Principles:

Various energy management principles are

- Procure Energy at lowest cost.
- Use Energy at Highest possible efficiency
- Use low investment technologies.
- Reduce Reuse and Recycle.
- Fuel substitution
- Use of renewable Energy

Energy Management structure:

There is Energy management cell at Institute Level headed Prof. A.H. Bendale. Each department representatives are part of Energy management cell for effective implementation or Energy management program at department levels.

There are following certified Energy Auditors:

Prof.(DR.) B.E.Kushare Head of Electrical Engineering dept.,K.K.Wagh Engineering College Nashik

Prof A. H. Bendale: Professor and Head of Computer Science Department Prof. R.N.Kanojiya: Professor of Computer Science Department Mr. R. B. Wagh : Librarian

Types and Use of Energy

Sr.No.	Type of Energy	Energy Use
1	Electrical energy	Indoor and outdoor illumination Ventilation Air conditioning. Water Pumping. Computers and peripherals Laboratory Equipment's
2	LPG	Science Laboratories

Electrical Supply System:

Electrical supply to campus is through 11 KV HT supply from MSEDCL over head line 500 KVA Packaged substation is installed to step down 11 KV supply to 415 V in substation. Electrical supply is distributed to various sections of campus through underground cable network protected adequately to avoid mechanical damage .Energy is measured by Utility at 11 KV by using TOD meter.

Backup Power Supply:

Back up supply arrangement is provided to 100% campus by installation of 320K VA DG set with AMF facility.

Reactive Power management:

Reactive power management is carried out using detuned RTPFC panel at Substation Level

Energy management Action Plan:

Improvement in Energy efficiency:

- Use of star labeled Equipment's such as Refrigerator, Air conditioners.
- Replacement of Conventional T8 36/40-watt florescent lamps by T8 18W LED tube. Replacement of 1 50HPSY street light fixtures by 72 W LED Street Light Fixtures.
- Use of TFT computer monitors.
- Replacement of conventional ceiling fans by BLOC ceiling Fans.

Elimination of Energy wastages:

- Maximum use of natural day light for indoor illumination.
- Use of natural ventilation.
- Good Housekeeping practices.

Energy Cost Optimization:

- Maximum demand optimization by adequate reactive power management.
- PF incentive by maintenance of Power factor above 0.995.
- Use of detuned RTPFC to eliminate risk of resonance.
- TOD tariff benefits by operating flexible load during off Peak Period.
- Use of dual trigger RTPFC panel to optimize DG fuel consumption

Training and awareness programmes:

- Conducting awareness program for staff, students and society.
- Active involvement of UG /PG students in awareness program in schools.
- Conduct competence enhancement program for industry professional in the area of Energy management.



ENERGY POLICY

K.K. Wagh education society'sK.K.Wagh Arts, Commerce and Computer Science College

Nashik is one of the leading Institutions.

Minimize Energy consumption by use of Energy efficient Equipment's and maximum use of day light, natural ventilation and Energy substitution.

Maximize use of renewable Energy.

Create Awareness about Energy conservation. •

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Manage efficiently utilization of Energy resources by use of cleaner and more efficient This we plan to achieve:

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- Train faculties, students, Industry professionals to make institute the pace setter in the •
- Promote awareness related with Energy conservation among various sections of society
- Enrich our experience on Energy conservation by exchange of ideas with other • •
- Encourage faculty members to obtain certification as a certified Energy Auditors and • Carry out regular internal energy audit to identify energy conservation opportunities.
- Provide Expertise to industry and other organizations in the area of Energy management
- by offering Energy Audit Services.

Dr. V.M.Sewlikar Principal