



SATHYABAMA

Institute of Science and Technology

Chennai, Tamil Nadu-600119

ENERGY MANAGEMENT POLICY & PLAN

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SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

ENERGY MANAGEMENT POLICY

1. Need

Sathyabama Institute of Science and Technology is keen in using energy in an effective, efficient and environmentally friendly way. The policy will serve as a guideline for the optimal consumption of energy throughout the institution. It will enable better working environment still abiding economical techniques of energy conservation with reduced greenhouse gas emissions. Sustainability will be the primary objective and the Institution believes that one of the major means of achieving this would be to process waste and recover energy, in addition to implementing other clean energy options.

2. Responsibility

The management, staff and students of the Institution have taken up the responsibility in conserving the energy. Several strategies have been coherently designed and emphasis is made to follow the same. A designated Centre of Excellence for Energy Research and the Department of Electrical Engineering have a key role to play in monitoring and governing the devised policy apart from involving in audits, development of clean and affordable energy technologies.

3. Policy

The institution is committed to responsible energy use and will practice energy efficiency in all facilities and processes, wherever it is cost effective.

To implement this policy, we will:

- Achieve and maintain compliance with applicable legal and other requirements.
- Continuously improve energy efficiency by establishing and implementing strategic energy management practices worldwide that support manufacturing, distribution and service capabilities while providing a safe and comfortable work environment.
- Consider energy efficiency as a factor in product development and in process and facility design and in the procurement of goods and services.
- Procure adequate and dependable energy supplies at the most advantageous rate and implement appropriate risk contingency plans to protect operations from supply interruptions.
- Encourage continuous improvement in energy conservation by employees.

- Use energy consumption data to establish Key Performance Indicators (KPIs) to drive performance improvements. We will measure, review and communicate our progress on a regular basis to ensure availability of information to our employees.

- Ensure adequate resources are available to work towards achieving KPI goals.

Based on the review, suitably adopt clean energy options wherever possible. For instance convert all available roof tops for solar energy installations; capitalize the free space and the wind currents for wind mill installations, powering generators with biodiesel ,fueling more number of institution buses with biodiesel etc.,,

4. Energy efficiency plan

The Energy efficiency plan is a National Action Plan for Energy Efficiency. It was a private-public initiative to create a sustainable, aggressive national commitment to energy efficiency through the collaborative efforts of gas and electric utilities, utility regulators, and other partner organizations. Energy efficiency is **the use of less energy to perform the same task or produce the same result**. Energy-efficient homes and buildings use less energy to heat, cool, and run appliances and electronics, and energy-efficient manufacturing facilities use less energy to produce goods. The following are the templates to plan out actions to improve environmental performance of the institution.

4.1. Switch off appliances when not in use

| Action | Responsibility | Target date | Results |
|---|----------------|-------------|---------|
| Check if lights, appliances and equipment are turned off when not in use | | | |
| Investigate feasibility of automatic switch –off functionality for lights, appliances and equipment | | | |
| Identify the opportunities for improvement and provide appropriate education to staff | | | |

4.2. Set thermostat to between 24 and 26 degrees for cooling in summer and between 18 and 20 degrees for heating in winter

| Action | Responsibility | Target date | Results |
|---|-----------------------|--------------------|----------------|
| Check the thermostat, draughts seals and insulation | | | |
| Identify opportunities for improvement and provide appropriate education to staff | | | |

4.3. Choose energy efficient equipment when purchasing or leasing equipment and appliances

| Action | Responsibility | Target date | Results |
|---|-----------------------|--------------------|----------------|
| Check the energy rating of existing appliances | | | |
| Assess future purchasing needs and identify energy efficient options | | | |
| Identify opportunities for improvement and provide appropriate education to staff | | | |

4.4. Minimize temperature leakages via good draught seals, insulation and keeping the doors closed.

| Action | Responsibility | Target date | Results |
|--|-----------------------|--------------------|----------------|
| Check the premises for gaps in seals or areas where air is entering or existing the building | | | |
| Identify if these gaps are working against the heating and cooling system | | | |
| Put in place measures to improve the seals and keep doors closed to maximize the efficiency of heating and cooling systems | | | |

4.5. Run business on renewable energy

| Action | Responsibility | Target date | Results |
|---|----------------|-------------|---------|
| Check the energy bill to see if you are purchasing renewable energy | | | |
| Elect to purchase Green Power | | | |
| Investigate solar power opportunities the business | | | |

Being an Education institution constraining more 10,000 students it is very important to use energy efficiently. The energy audit of the institution is done every year and most of the buildings are using renewable energy sources. In future the students relevant with energy are involved in the energy efficiency plan and it is useful for both the institution and also to the students for their future.