

Energy efficiency and energy conservation: A case study in Rajarata University of Sri Lanka

Extended Abstract

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Background

Over the past two decades, the higher education sector has focused on environmental conservation and sustainable development. This has been driven not only for the environmental movements, but by the cost savings, public relations and legal compliance. Over the same period, energy conservation has been raised by a wide range of organizations in the service sector and public bodies. Energy conservation means making an effort to reduce the consumption of natural energy sources like electricity, water etc. people depend on energy for almost everything in their lives, for comfortable life, for productive and for enjoy. It is always seen that there exist a gap between generation of energy and demand of energy (Biswajit, 2013). Energy is an exhaust resource. If people do not conserve energy, people will have nothing to use. Also, energy conservation is also important when it comes to climate change. Currently, erratic climates and climatic changes are the greatest threats that we are facing. In order to ensure the sustainability of energy supply and subsequently of the country's sustainable economic development, the government has to intensify further the implementation of energy efficiency programs (Oyedepo, 2012). Faculty of Social Sciences and Humanities of Rajarata University of Sri Lanka was selected to study and make some recommendations to enhance the energy efficiency and energy conservation through examining the attitudes towards the energy conservation among the students of the Faculty.

Objectives

Overall aim of study was to make some recommendations for enhancing the energy efficiency and energy conservation of Rajarata University of Sri Lanka. Specific objectives were to find out the present situation (what are the

activities, strategies, policies, and infrastructures on conservation energy), to find the level of awareness on energy conservation of students and staff of faculty and to introduce some alternative measures to conserve energy.

Methodology

This research used primary data and secondary data. Primary data was the most important data for the study. A questionnaire based survey was conducted with a random sample of 50 students to collect primary data. Interviews and discussions also used as methods for collecting primary data. To collect data interviewed a senior lecturer and electrical supervisor of the Rajarata University. To get secondary data used internet sources, previous research papers and books.

Results

According to research, for energy efficiency and for energy conservation gender of the respondent was not an important factor. According to the analysis, 68% students were aware about 10 to 5 measures to conserve the energy hence enhance energy efficiency. It is a favorable condition. 62% students used to conserve energy as a cost saving method. Study also found that only 25% students conserve energy because of environmental reasons. Also among the students, 84% students were with the idea that there is no proper dialogue among the students over the energy conservation. 85% students are like to participate some awareness programs and for some activities.

Conclusion and recommendation

There are two ways to reduce the use of energy. They are quick actions and installing some equipment for long term benefits. Quick actions depend on behaviors. As examples turning things off, replace LED bulbs, maintain and Change the way of using AC. Installing things for long term benefits means use solar power, use sun shades for windows, awareness program and Use Green curtains / climbing plants etc.

By using these measures, energy consumption, can be reduce. Enhance the efficiency of energy use, Reduce environmental pollution and enhance the quality of University.

Keywords: energy, electricity, conservation, efficiency, Faculty

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