

Chettinad College of Engineering & Technology, Karur

Department of Electrical and Electronics Engineering

News Report

Programme Name: 5 days - Energy Audit

Date: 19-08-2024 to 23-08-2024 (5 Days)

Class & No. of Participants: III Year & 6 Students

Venue: Government Hospital, Kulithalai

Faculty incharge:

1. Mr. N. Vijayasarithi, AP/EEE
2. Mr. M. Vasanthprakash, AP/EEE

Description:

From August 19th to 23rd, our dedicated team—led by Mr. N. Vijayasarithi, Project Convener, Mr. M. Vasanthprakash, Project Coordinator, and third-year EEE students Mahalakshmi P, Manoj M, Santhoshkumar S, Suren K, Hariharasudhan S, and Vignesh C—conducted a comprehensive energy audit at the Government Hospital in Kulithalai. The primary objective of the audit was to evaluate energy consumption patterns and identify opportunities for energy efficiency improvements. This audit covered all major energy-consuming systems within the hospital, like lighting, HVAC, medical equipment, and electrical appliances. Students measured all the medical facility's electrical equipment power rating and estimated how much energy was utilised by each piece of equipment, which will show the energy consumption that could benefit from conservation or improved efficiency. The audit was conducted over five days. Energy consumption data was collected through direct measurement using energy meters and analysis of utility bills. Observations were also made on the operational efficiency of different systems.

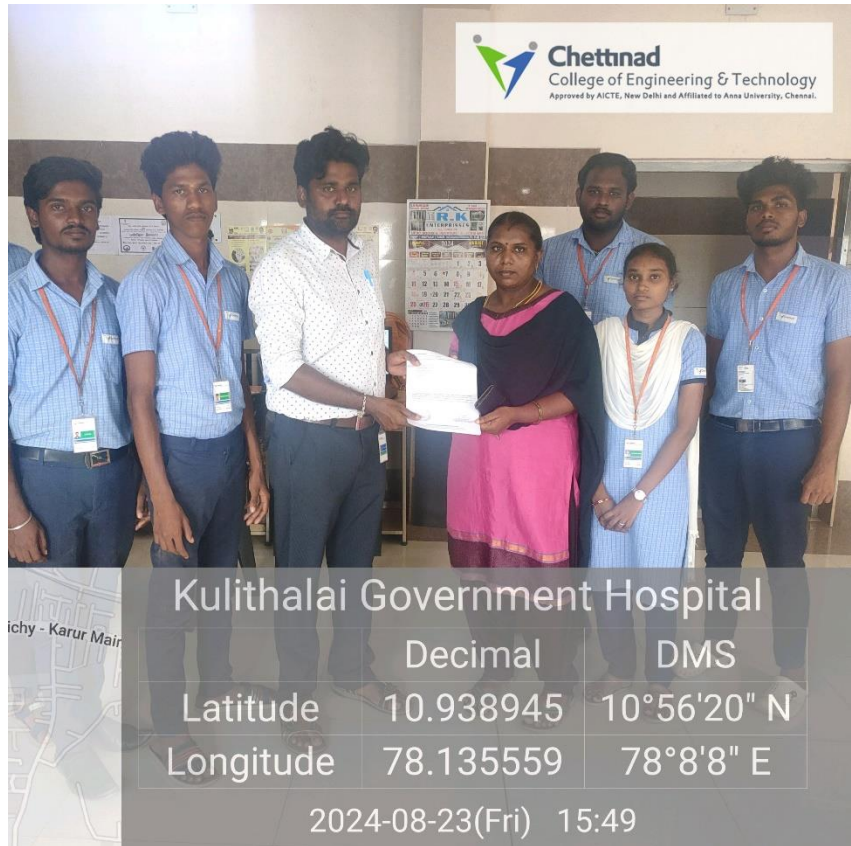
As per the Specific Energy Consumption (SEC) consideration, students calculated the hospital SEC, which was taken as a reference for comparison and was calculated to be 582 kWh/day. Energy Conservation Measures (ECM) with and without investment were recommended for potential energy savings for the hospital. Implementing the recommended measures could result in significant energy savings and reduce the optimised energy usage across the hospital.

Energy-saving potential could be achieved by implementing the given proposals with around Rs 4,79,014 per annum. Finally, the energy audit report was submitted to the Chief Medical Officer, and students received certificates and appreciation. Mr. N. Vijayasarithi, HoD/EEE, thanked all of the students who took part in the energy audit.

Faculty incharge: Mr. N. Vijayasarithi, AP/EEE and Mr. M. Vasanthprakash, AP/EEE

Audit Photos:





Kulithalai Government Hospital

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| Latitude | 10.938945 | 10°56'20" N |
| Longitude | 78.135559 | 78°8'8" E |

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