## <u>Report of the Short Term Training Programme on Energy Audit</u>

The short term training programme on Energy Audit organised by the Dept. of Electrical Engineering, Govt. Engineering College, Thrissur, sponsored by TEQIP Phase II and technically supported by Energy Management Centre, Kerala, started on 17<sup>th</sup> October 2016 at the Maxwell Hall of Electrical Engineering Department.

The STTP was formally inaugurated on 17/10/2016 by Sri. A. M. Narayanan, Head, Energy Efficiency Division, Energy Management Centre, Kerala. Dr. M. Nandakumar, Head of the Department, extended the welcome speech. Dr. K. P. Indiradevi, Principal presided over the function.





Dr. B. Jayanand, Professor and former Head of the Electrical Engineering Department and Prof. Manoj Kumar K. V. of Computer Science Department, TEQIP coordinator, felicitated the course. Smt. Mini V., coordinator, presented an overview of the course and Smt. M. J. Laly, coordinator extended Vote of Thanks to all present at the function.

First session was handled by Sri. A. M. Narayanan, Head, Energy Efficiency Division, Energy Management Centre, Kerala. He talked about the need for energy efficiency in the Indian sector. In the next session, he presented a detailed overview of the fundamentals of energy management and energy audit. He inspired the participants for conducting electrical audit in industries.





In the afternoon session, Sri. Johnson Daniel, Senior Energy Technologist, EMC, Kerala, introduced various energy audit equipments, to the participants. He explained the use of each of them. In the next session, he explained the energy conservation act of 2001 and created awareness regarding the rules stated in the act.





The sessions of the second day were handled by Sri. T. Sankaranarayanan, Regional Director, National Productivity Council, Mumbai. He took classes on the energy efficiency of electrical and thermal utilities. The speaker gave fruitful ideas on how to calculate the energy efficiency of different utilities.



Third day, 19/10/2016 started with a brief discussion on the calculations of solar PV system design by the coordinators of the course, Smt. Mini V. and Smt. M. J. Laly. They gave a handout describing the design of solar PV system for house hold requirements and a sample design problem.

A plant visit to the Milma plant near the college was arranged at 10:00 a.m. Dairy Manager of Milma, Thrissur section, Sri. K. Janardhanan gave an overview of the functioning of Milma units in Kerala. Sri. GeeVarghese, Plant Engineer, detailed about the collection, storing, processing and packing of milk and curd at the Thrissur Milma Unit.

In the afternoon, first session was on Energy Efficiency in Buildings handled by Sri. Suresh Babu, Founder Partner of M/s. Ottotractions. He discussed about the energy efficient options in lighting systems, UPS systems and heat pump system with relevant case studies.



The next session was about energy efficiency opportunities in dairy sector, handled by Sri. Suresh Kumar M., Additional Director, Petroleum Corporation Research Association, Kochi. He presented an overview about the theoretical aspects of functioning of dairy units and their energy efficient working principles.





A test of evaluation and feedback was taken from the participants. The STTP on Energy Audit came to an end with a valedictory session. Certificates were distributed to the participants.





Participants found the programme useful, since they got an idea about how to reduce wastage of energy in all sectors of working. Also, they got awareness on the BEE Certified Energy Auditor exam and got motivated to become certified energy auditors.

Prepared by Mini V., APEE, Coordinator.