ENERGY MANAGEMENT & AWARENESS TRAINING PROGRAMME

COURSE OBJECTIVES

On completion of this course, participants should be able to:

- Understand the energy impact associated with the operation of key utilities and process applications within their areas of operation
- Be able to evaluate system anomalies and where energy efficiency is lacking, with identification of key areas for improvement.
- Be able to evaluate the cost borne with operating and maintaining key utilities and measures for improving same.
- Calculate heat transfer loads for significant process's and the resultant primary energy costs in fuel and carbon taxation costs.

DURATION

Course will be delivered over 5 days, with 4Hr classroom sessions per module.

WHO IS THIS COURSE INTENDED FOR?

- This course is intended for engineers, plant managers, and senior maintenance engineering personal that are responsible for accounting for the energy impact associated with plant operations.
- In undertaking the course participants are expected to have fundamental engineering principles where an engineering qualification would prove advantageous.

COURSE CONTENT

- Introduction to energy management principles, energy terminology, and considerations with equating in primary energy terms
- Steam and Thermal Energy Systems efficient generation & distribution
- Chilled water efficient generation, distribution, and usage
- Heat transfer technologies, incorporating best engineering practices, areas for heat recovery and pinch technology, and identification of areas of opportunity.
- Hydraulic pumping, with evaluating pumping efficiencies, including Variable Speed Drive (VSD) applications
- Psychrometrics and evaluating Heating Ventilation & Air Conditioning (HVAC)
- Lighting, lighting terminology, energy efficiency considerations
- Compressed air generation and efficiency improvements

ASSESSMENTS

- Participants will be required to complete a multiple choice equation based questionnaire per module. Questionnaire is open book format where participants are required to complete the questionnaire between modules