

MC1

Management Category Training

Certification

**5 DAYS
TRAINING**

Energy Manager Training Course (EMTC)

Training Summary

Energy security and sustainability are the key challenges facing enterprises and policy makers across the globe. Prudent management of energy allows enterprises to abide by the Efficient Management of Electrical Energy Regulation 2008 and to support the commitment of Malaysia to contribute to a greener world by reducing the carbon emission intensity by 40% by the year 2020. AEMAS Workshop on Energy manager Certification is recognized by the Malaysia Energy Commission.

This course also help participant to establish and implement a sustainable energy management system in the enterprise, in compliance with the ISO 50001 standard, and in preparation for AEMAS Energy Management Gold Standard certification. The course is taught by certified energy managers who are also certified trainers from industry and from Universiti Teknologi Malaysia (UTM), and are among those who have successfully implemented the Sustainable Energy Management System. Get the first-hand insights from certified Energy Managers/Trainers from University Teknologi Malaysia(UTM).

Learning Outcomes

- 1) Understand the comprehensive sustainable energy management programme.
- 2) Learn the skills to establish and sustain for businesses, to increase energy efficiency and significantly reduce energy cost.
- 3) The Certified Energy Manager under this scheme can apply for conversion to Registered Electrical Energy Manager (REEM).

Learning Benefits

For the Energy Manager Trainees

- 1) Understand the context of energy use in Malaysia and the world as well as local laws and regulations, which help business to proactively prepare for the energy management and to comply with the law.
 - 2) Ability to establish and implement a sustainable energy management system in the enterprise, in compliance with the ISO 50001 standard, and in preparation for Energy Management Gold Standard certification.
 - 3) Improve professional standing with a certificate validated in 10 ASEAN countries.
- Provide employment opportunities through a network of ASEAN Energy Management Scheme in ten ASEAN countries.

For Businesses

- 1) Establish energy management system to use energy in a systematical manner.
- 2) Save energy costs, become economically competitive.
- 3) Minimize energy losses, save money.
- 4) Ease the application of other quality systems like ISO 50001 and TPM.
- 5) Achieve Energy Management Gold Standard certification.
- 6) Improve the businesses image as a sustainable and efficient business.
- 7) Increase the competitive position regionally and internationally, with a certification recognized in 10 ASEAN countries.

Targeted Participants

Future Energy Managers, Professionals from any discipline, Facility / Maintenance Managers or Engineers and Industry personnels.

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Energy Manager Training Course (EMTC) - cont.

Course Outline

1) Global & Local Energy Trends

2) Energy Efficiency Standard & Labelling

3) Energy Policies & Legislations

Energy Policies in Malaysia.

Legislations Related to Energy Management.

4) Introduction to Sustainable Energy Management

Introduction to AEMAS & Sustainable Energy Management.

Definition and role of Energy Manager.

Responsibilities of Energy Manager.

Recommended Code of Practice for Energy Manager.

5) Setting up a Sustainable Energy Management System

Effective Tool for Appraising Energy Management Performance or Organization.

Methodology for Preparation of Energy Management System.

Setting of Energy Target and Plan.

Integration of Energy Management System into Business Practice.

6) Managing Activities in Sustainable Energy Management

Project Management & Controlling.

Energy Management & Performance Review.

7) Fundamental of Electrical System

Overview of Energy.

Electrical Energy Basics.

Electrical Loads and Maximum Demand.

Power Factor and Capacitors.

Transformer.

Electricity generation, Transmission and Distribution Structures and Classifications.

Electricity Unit and Conversion.

8) Understanding of Energy Pricing and Electricity Bills

Structure of Energy Pricing Related to Electricity Supply.

Understanding of Electricity Billing System and Electricity Bills.

9) Introduction to Energy Audit

Need and Approaches in Energy Auditing.

Methods and Approaches in Energy Auditing.

Criteria of an Effective Energy Audit and Report.

Measuring and Monitoring Equipment.

Energy Management Monitoring and Control Equipment or System.

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Energy Manager Training Course (EMTC) - cont.

10) Energy Efficiency and Conservation Potentials

Electric Motors.
 Compressed Air System.
 HVAC and Refrigeration System.
 Cooling Tower.
 Fans and Blowers.
 Pumps and Pumping System.
 Lighting System.
 Office Equipment.
 Control and Variables Speed Drives.
 Energy Efficient Technologies and Application in Electrical System.
 Boiler.

Course Objective

Energy Manager Training Course has been designed to provide knowledge and skills to implement Sustainable Energy Management Systems to all Energy Managers and certify them under the scheme.

Pre-requisites for Participants

- 1) Age above 21 years old with proficient in English.
 - 2) Holds a degree in Engineering, Science, Economic, Accountancy, Law etc.
 - 3) At least 2 years experience in Supervisory/ Managerial Role.
- (All supporting documents must be certified true copy by Superior or HR department)

Trainer Profile

Refer to Trainers:

- 1) Prof. Ir. Ts. Dr. Zainuddin Abdul Manan
- 2) Prof. Ir. Ts. Dr. Sharifah Rafidah Wan Alwi
- 3) Ir. Dr. Lim Jeng Shiun
- 4) Prof. Ir. Dr. Mohammad Yusri Hassan
- 5) Prof. Ir. Dr. Haslenda Hashim
- 6) Ir. Al-Khairi Mohd Daud