

Please fax or email the registration form to:

**Sustainable Energy Development Authority Malaysia, Galeria PjH, Aras 9, Jalan P4W,
Persiaran Perdana, Presint 4, 62100 Putrajaya
No. Tel: 03-88705850/03-8870 5849 No. Fax: 88705900
Email : rizal@seda.gov.my / hambali@seda.gov.my**

Full Name (as in IC/Passport): _____

IC/Passport No.: _____ Nationality: _____

Gender: _____ Company Address: _____

Postcode: _____ City: _____ State: _____

Phone No.: _____ Fax No.: _____ H/P No.: _____

Email: _____

Disipline / Major in: _____

I hereby confirm that the information provided is true and correct and understand the terms and condition below.

Signature

Name :

TERMS AND CONDITIONS

- 1) The registration fee is not refundable and no cancellation is allowed except for replacement.
- 2) A replacement can only made latest by two weeks before the event.
- 3) Each participant **MUST** send the registration form together with the payment slip (for electronics fund transfer – EFT) or photocopy of cheque (together with the bank-in slip) as proof of payment.
- 4) Registration of participant does not warrant confirmation of seat until payment has been made. The seat will only be allocated once payment is received by SEDA Malaysia.
- 5) The training is limited to 30 participants only.
- 6) Payment can be made by cheque or electronics fund transfer (EFT) via Cimbclicks only to:

Bank account number and bank details :

Account Owner : Sustainable Energy Development Authority Malaysia
Account No. : 8600308067
Bank Name & address : CIMB Bank Berhad
Swift Code : CIBBMYKL



ENERGY EFFICIENCY MANAGEMENT FOR ENERGY AUDIT IN BUILDING TRAINING



2 - 4 MEI 2017

AUDITORIUM SEDA MALAYSIA

Fee: RM2,650 /pax (Inclusive GST)

Eligible for 12 hours credit of CDP for Registered Electrical Energy Manager (REEM)

ROGRAM OUTLINE DAY 1

INTRODUCTION

Energy Audit is a systematic method for evaluating the energy efficiency performance of a building and identifies opportunities to conserve energy in order to enhance the efficiency of its use. The energy audit results is importance to encourage building owners and top management of the building to reduce operational cost energy consumption based on the facts baseline of the building.

The key objective of this training is to enhance the level of understanding and auditing of energy management to a more comprehensive and detailed information for the auditor or competent professional in the building sector and industry.

The training module intends to meet the need of competencies and produce more auditors to conduct energy audits at government building and provide sector to evaluate the performance of energy usage and identify the potential for improving energy efficiency.

<i>Time</i>	<i>Topic</i>	<i>Duration</i>
9.00 a.m.	Introduction & Overview	15 mins
9.15 a.m.	Overview Of Energy And Energy Efficiency For Buildings <ul style="list-style-type: none"> • <i>Learning outcomes</i> • <i>Energy policies</i> • <i>Energy consumption trends</i> • <i>Energy efficiency initiatives in building sector</i> • <i>Energy efficiency potentials for building sector</i> • <i>The way forward</i> 	1 hr
10.15 a.m.	Break	15 mins
10.30 a.m.	Introduction To Energy Audit <ul style="list-style-type: none"> • <i>Types Of Energy Audit</i> • <i>Energy Audit Process</i> • <i>Desktop Data Collection</i> • <i>Field Data Collection</i> • <i>Energy Data Analysis</i> • <i>Identification of Energy Conservation Measures</i> • <i>Reporting And Presentation</i> 	1 hr 15 mins
11.45 a.m.	Energy Auditing Measurement Tools <ul style="list-style-type: none"> • <i>Learning Outcomes</i> • <i>Introduction To Measurement In Energy Auditing</i> • <i>Setting The Measurement Objective</i> • <i>Accuracy & Reliability Of The Measurement</i> • <i>Practical Exercises</i> 	1 hr 15mins
1.00 p.m.	Lunch Break	1 hr 30 mins
2.30 p.m.	Energy Saving Measures From Electricity Supply And Distribution System <ul style="list-style-type: none"> • <i>Learning Outcomes</i> • <i>Introduction</i> • <i>Electricity Tariff Optimization</i> • <i>Eliminating Power Factor Penalty</i> • <i>Reducing Maximum Demand Charges</i> • <i>Reducing Electric Distribution System Losses</i> 	1 hr
3.30 p.m.	Tea break	15 mins
3.45 p.m.	Implementation of EnMS <ul style="list-style-type: none"> • <i>System & Performance Checking</i> • <i>Management Review for improvement</i> 	1 hr 15 mins
5.00 p.m.	End of Day 1	

PROGRAM OUTLINE DAY 2

Time	Topic	Duration
9.00 a.m.	Energy Saving Measures For Air Conditioning Systems <ul style="list-style-type: none"> • Learning Outcomes • Overview of functions, types & common areas of wastage for AC System • Calculations & case studies • Indoor air temperature setting • Basics of Ice Thermal Storage • Basics of District Cooling System 	9.00 a.m.
10.30 a.m.	Morning Break	10.30 a.m.
10.45 a.m.	ENERGY SAVING MEASURES FOR LIGHTING SYSTEMS <ul style="list-style-type: none"> • Learning Outcomes • Types of Lamps • Energy saving measures for lighting system 1. Examples of energy saving calculation for lighting systems 	10.45 a.m.
1.00 p.m.	Lunch	1.00 p.m.
2.30 p.m.	Energy Saving Measures For Motors <ul style="list-style-type: none"> • Learning Outcomes • Introduction • Understanding Motor Efficiency • High Efficiency Motors & Financial Analysis • Variable Speed Drives • Basic Guidelines On Motor Optimizations 	2.30 p.m.
3.30 p.m.	Tea Break	3.30 p.m.
3.45 p.m.	Energy Saving Measures From Building Envelope <ul style="list-style-type: none"> • Learning Outcomes • Variables Affect The Thermal Performance Of A Building • Solar Heat Gain Through Windows • Heat Gain Through Structure • Outside heat gains • Internal load • Examples 	3.45 p.m.
5.00 p.m.	End of Day 2	5.00 p.m.

PROGRAM OUTLINE DAY 3

Time	Topic	Duration
9.00 a.m.	Financial Analysis And Business Proposal <ul style="list-style-type: none"> • Learning Outcomes • Introduction to Investment Analysis Concepts • Financial Analysis Tools • Investment Analysis Process • Preparing A Business Proposal 	1 hr 15 mins
10.15 a.m.	Break	15 mins
10.45 a.m.	Group Project and Activities	2 hr 15 mins
1.00 p.m.	Lunch	1 hr 30 mins
2.30 p.m.	Group Presentation	1 hr
3.30 p.m.	Break	15 mins
3.45 p.m.	Group Presentation	1 hr
4.45 p.m.	Wrap-up session	15 Mins
5.00 p.m.	End of Program	

OBJECTIVE:

- Discover and raise the level of understanding and auditing of energy management to a more comprehensive and detailed information for the auditor or competent professional in the building industry.
- Encourage participants to practice efficient energy management in their organization
- Meeting the needs of competencies and produce more auditors to conduct energy audit at the buildings

TRAINERS

Ir. Mohd Khairul Anuar Sharif

Years of Experience: Over 10 years in Energy Management, Renewable Energy, Green & Sustainability, facility Management and Project Management

Qualification: Graduated (Miyazaki University, Japan) in 2000, majoring in Mechanical System engineering. Also Competent registered Electrical Energy Manager, trainer for EE Government Dept. and Qualified Green building Index Facilitator.

Career started in 2000 with oil & gas industry as Project engineer for three (3) year later then pursued study Master in Mechanical System Engineering at Nagaoka University of Technology, Japan. He then joined Jabatan Kerja Raya Malaysia as Mechanical Engineer and actively in Energy Efficiency, Energy Audit for existing and newly constructed building.

Had been involved numbers of energy audit project for government building and also Technical committee for evaluation consultant work conducted by ESCO for government energy audit consultancy i.e. Hospital, University, office Building and etc. He was one of the committee in developing Energy Audit Training course for JKR staff for capacity building purposed.

Over the course of his career, he has developed sound skill in Green Building Rating system, such as Green Building Index (GBI) and has sound knowledge in most local and international standard related to the green building rating system such as ASHRAE and Malaysian Standards. He has conducted over 30 building and industrial energy audit, trained well over 100 professionals in Energy manager Training and involved in many working groups for the Malaysian Governemnt's policy and regulation input.

He is also an appointed Technical Advisor for the MGTC since 2010 to train more than 100 Government Building Operators and End Users in Putrajaya and Cyberjaya on "Sustainable energy Management Principle". Currently, he is heading a team of qualified trainers to develop a new training module for MGTC to roll-out similar trainings throughout the nation, following a successful outcome from the continuous training sessions to Putrajaya & Cyberjaya.

TRAINING MATERIALS IS PROVIDED!!!

