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 : rosliza@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**

100% HRDF CLAIMABLE

ENERGY EFFICIENCY MANAGEMENT FOR ENERGY AUDIT IN BUILDING TRAINING

21st – 23rd APRIL 2020

SEDA MALAYSIA

Fee: RM2,650 /pax

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

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.

PROGRAM OUTLINE DAY 1

Time	*Topic*	*Duration*
9.00 a.m.	***Introduction & Overview***	***15 mins***
9.15 a.m.	***Overview Of Energy And Energy Efficiency For Buildings*** • *Learning outcomes* • *Energy policies* • *Energy consumption trends* • *Energy efficiency initiatives in building sector* • *Energy efficiency potentials for building sector* • *The way forward*	***1 hr***
10.15 a.m.	***Break***	***15 mins***
10.30 a.m.	***Introduction To Energy Audit*** • *Types Of Energy Audit* • *Energy Audit Process* • *Desktop Data Collection* • *Field Data Collection* • *Energy Data Analysis* • *Identification of Energy Conservation Measures* • *Reporting And Presentation*	***1 hr 15 mins***
11.45 a.m.	***Energy Auditing Measurement Tools*** • *Learning Outcomes* • *Introduction To Measurement In Energy Auditing* • *Setting The Measurement Objective* • *Accuracy & Reliability Of The Measurement* • *Practical Exercises*	***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*** • *Learning Outcomes* • *Introduction* • *Electricity Tariff Optimization* • *Eliminating Power Factor Penalty* • *Reducing Maximum Demand Charges* • *Reducing Electric Distribution System Losses*	***1 hr***
3.30 p.m.	***Tea break***	***15 mins***
3.45 p.m.	***Implementation of EnMS*** • *System & Performance Checking* • *Management Review for improvement*	***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*** • *Learning Outcomes* • *Overview of functions, types & common areas of wastage for AC System* • *Calculations & case studies* • *Indoor are 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*** • *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*** • *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*** • *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*** • *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***	**I 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 a practice efficient energy management in their organization
- Meeting the needs of competencies and produce more auditors to conduct energy audit at the buildings

TRAINERS

Andrea D'Rozario

Years of Experience: Over 10 years in energy efficiency and management, and design of sustainable buildings

Qualification: CEM Certified Energy Manager, Energy Commission Malaysia, 2001, BEng (Hans) Degree in Electrical and Electronic Engineering, University of Hertfordshire, 1996, BTec Higher National Diploma in Electrical and Electronic Engineering Nottingham Trent University, Kuala Lumpur, 1993, Certificate of Technology in Electronic Engineering, Tunku Abdul Rahman College (TARC), Kuala Lumpur, 1991, , GCE/GCEV (Vocational) in Mechanical Engineering, Technical Institute Kuala Lumpur, 1989.

Andrea D'Rozario is Director of E Phase Energy Consultancy and Training and received her Bachelor's Degree with Honours in Electrical and Electronics Engineering from the University of Hertfordshire, UK in 1996. Her main focus is to encourage efficient operation and maintenance of buildings via energy audits & investigations and implementation of energy management systems, a vital component in the Low Carbon Cities Framework (LCCF). She is an appointed professional trainer with the Malaysia Green Technology Corporation (MGTC) to lower energy and water consumption in government buildings in Putrajaya and Cyberjaya.

She is also involved in certification and commissioning efforts of commercial and industrial buildings under LEED and GBI. Her expertise and knowledge in the field of energy efficiency and management, and design of sustainable buildings was developed over the past 10 years. She is a Certified Energy Manager and is experienced in conducting energy audits for commercial and industrial buildings in the government and private sectors.

She was also actively involved in the building integrated photovoltaic project and fine tuning process for energy efficiency for the Malaysian Green Technology Centre (formerly the Green Energy Office, Malaysia Energy Centre) and also assisted in Off-Grid Photovoltaic systems for rural electrification projects for Tenaga Nasional Berhad.

She developed her career as an Energy Consultant in energy management and auditing with ECO Energy Sdn. Bhd. and then worked with SFG Technology Sdn. Bhd. as a Senior Systems Engineer on renewable energy projects. She went on further to work with IEN Consultants Sdn Bhd to assist in projects for sustainable buildings. She commenced her engineering career as an Electrical Engineer in Plant Maintenance for 3 years with Sime Rengo Packaging (M) Sdn. Bhd. and worked as a Business Development Executive in Innovation Labs Sdn. Bhd. dealing with Security Access & Control, CCTV and Building Management Systems.

TRAINING MATERIALS IS PROVIDED!!!