

Organised by:



(Co. No.321682-M)

Approved and endorsed by



Endorsed by:



Pembangunan Sumber
Manusia Berhad

Claimable From PSMB
Under the Prolus
Scheme
&
SBL KHAS

DATES:
Refer Schedule

VENUE:
To be Confirm Later

ECO ENERGY SDN BHD

Main Office:
35-2nd Floor, Jalan Ara SD 7/3A,
Bandar Sri Damansara,
52200 Kuala Lumpur

Tel: 603-6275 8187
Fax: 603-6275 8068

E-mail: general@eco-energy.com.my
Website: www.eco-energy.com.my

Certified Energy Manager Training Course

The training is conducted in 2 sessions :

SESSION 1: THEORY, PRACTICAL AND EXAMINATION * (5 DAYS)

SESSION 2: PROJECT PRESENTATION AND EVALUATION (1 DAY)

WHO SHOULD ATTEND

This training course is designed specially for:

- Plant Managers & Engineers
- Facility Managers & Engineers
- Maintenance Managers, Maintenance Planner & Engineers
- Senior Chergeman & Chergeman
- Engineering Service Managers & Engineers
- Senior Managers & Electrical Engineers involved in Maintenance and Plant Production and Consulting Engineers as well.

*** Please refer to the minimum qualification on Page 4*

ADDED VALUE!!

FREE PRELIMINARY AUDIT IF YOU SEND TWO OR MORE PARTICIPANTS!
(Additional costs will be charged for locations outside Selangor and W. Persekutuan - KL)

HANDS-ON ENERGY AUDIT
PRACTICAL TRAINING!

EXPERIENCED IN-HOUSE TRAINERS!

FREE CONSULTATION OF ENERGY
SAVING PROJECT!

Successful participants will be awarded the ENERGY MANAGER CERTIFICATE, recognised by SURUHANJAYA TENAGA

FREE

Preview of your company's Energy Consumption when you send 1 participant!

WHO WE ARE AND WHAT WE DO

ECO ENERGY is a well established local energy management consulting firm actively involved in the promotion of Energy Efficiency, Renewable Energy, Demand Side Management (DSM) and Supply Side Management (SSM) in Malaysia. We are also a professional team of Certified Energy Managers who conduct specialised training courses on Energy Management Principles and Technologies for Managers and Engineers as part of the Government's drive to promote the use of Energy Efficiently.

Since its establishment in 1994, ECO Energy has conducted numerous Energy Efficiency projects for the government and a large number of prominent industrial and commercial organisations in the private sector such as Pusat Tenaga Malaysia (PTM), Jabatan Pengairan dan Saliran (JPS), TNB, Telekom, Proton, North Port, CETREE, UiTM, Intel, Cognis Oleochemicals, Copper Development Centre, Hume Fibreboard, Golden Hope, Muda Papermill, Sabah Forest Industries and many others.

ECO Energy has a strong association with a number of reputable local organisations such as SIRIM, Suruhanjaya Tenaga (ST), PTM CETREE and Universiti Tenaga Nasional (UNITEN). We also work closely with a number of leading international energy management consulting firms such as Electrowatt-Ekono (ASIA) Pte. Ltd. and IEMC (Australia)

** Examination consist of 3 parts.*

Part 1 : Eleven (11) problem solving assignments on various energy efficiency techniques

Part 2 : Energy Saving Project

Part 3 : 61 multiple choice questions from selected topics

Dr. Hassan Bathish

Ph.D. Engineering, MBA (Tech), MIE (Aust) & MRS (Aust)

Dr. Hassan is an accredited Energy Audit Consultant and a registered consultant with the Asian Development Bank. Dr. Hassan is the Technical Director of ECO Energy Sdn Bhd and has more than 30 years of international experience in the Energy Management field. His work has led him from Syria, Egypt, Russia, France, England, Saudi Arabia, Australia and finally to Malaysia. He has extensive experience in training and facilitating Energy Management and Demand Side Management workshops.

Azizah Kassim

B Eng (Hons) Electrical Engineering, UM

Ms Azizah is the Senior Manager – Energy Consultant with ECO Energy Sdn Bhd. She has sound experience in Electrical Power Systems and Project Management. She has gained strong knowledge and experience through her involvement in various Energy Efficiency projects and training undertaken by the company.

Steve Anthony Lojuntin

B Eng (Hons) Mechanical Engineering, UM

Steve is the Mechanical Engineering Manager with ECO Energy Sdn Bhd. He has strong experience in designing and commissioning mechanical services for commercial and other buildings. He is also the Local Technical Advisor for the DANIDA/MECM Low Energy Office Building project in Putrajaya and also currently involved on the promotion of Energy Efficiency in building in Malaysia.

SESSION I: 5 DAYS

****A detailed schedule will be provided upon request****

Day 1: 9.00 - 5.00 pm

1. Course Outline and Introduction
2. Energy Position in Malaysia
3. Energy Cost Allocation
4. Energy Saving Opportunities in Industries and Commercial Buildings
5. Mass and Energy Balance
6. Fundamentals of Energy Audit Techniques
7. Energy Audit Measurements
8. Understand and Minimising Your Energy Bill Cost (Assignment 1)

Day 2: 9.00 - 5.00 pm

1. Refrigeration & Air Conditioning (Principle and Energy Saving Measures)
2. Reducing Air Conditioning Loading Through Improvement of Building Envelope (Assignment 2)
3. Lighting (Principle & Energy Saving Measures (Assignment 3)

Day 3: 9.00 - 5.00 pm

1. High Efficiency Motors (Assignment 4)
2. Use of Variable Speed for Saving Energy in Pumps & Fans (Assignment 5)
3. Understanding Harmonics
4. Compressed Air—Principle & Energy Saving Measures (Assignment 6)
 - Compressed Air System, Compressor Type & Selection

Day 4: 9.00 - 5.00 pm

1. Process Heating & Waste Heat Recovery (Assignment 7)
2. Boilers & Water Heating (Assignment 8)
 - Boiler Type & Efficiency
 - Combustion of Fuels
3. Cogeneration (Assignment 9)

Day 5: 9.00 - 5.00 pm

1. Financial Analysis of Projects (Assignment 10)
2. Energy Management Strategic Plan (Assignment 11)
3. Company Energy Management Policy
4. Energy Conscious Purchase & Design
5. Energy Monitoring, Control and Reporting
6. Involving People in Energy Efficiency and their Training
7. Presenting a Proposal - Effective Communication
8. Project Assignment Selection

A WORKING PROJECT ASSIGNMENT

Participants are required to conduct, with ECO Energy's support a project assignment to be carried out at their workplace. The project is to be implemented partly or wholly before the start of Session II of the training.

SESSION II: 1 DAY

Day 1: 9.00 - 5.00 pm

1. Presentation of participant project assignment.

The training course structure is subject to change from time to time to meet the requirements of Suruhanjaya Tenaga

NOTE: The training assignments & project assignment is to be treated as an examination for obtaining the Energy Manager Certificate

HOW OTHERS HAVE BENEFITED FROM THE COURSE

"I found the course informative, relevant and practical. It has provided me with various methods and techniques to help my company save energy. What is really good about the course is that I learned from other participants on how they managed to help their companies with energy saving which in turn gave me ideas to do the same for my company"

Mr. Saw David Thein (Project Engineer - MEMC Electronic Material Sdn. Bhd.)

"The training is very informative, practical and useful. The training really provides all the necessary technical knowledge required to reduce your cost on energy consumption. The benefits gained from this training will definitely be recovered in the training fee"

En. Megat Shariffudin (Senior Engineer - RCI Cement Sdn. Bhd.)

"A very good course that was an eye opener to the potentials of energy savings which I never knew. The various ways to calculate the energy saving is an effective method that I will show my management"

Mr. Chiang Yeat Shing (Technical Manager - NS Softec (M) Sdn. Bhd.)

"I have benefited a lot after attending the course. I now have a better understanding of the energy consumption in our mills and how to utilize energy efficiency through energy management"

Mr. Jason Loh (Mill Manager - Trio Paper Mills Sdn Bhd.)

"Very attractive, informative and excellent course. Given valuable lesson and extraordinary knowledge on implementing energy saving project at no cost. Comprehensive course and highly recommended to others.

Mr. Koh Lek Keong (Chief Engineer - Mines Resort City Berhad)

"Helpful and very beneficial and makes my work easy and systematic"

En. Rosli Omar (Sr. Plant Engineer - Acidchem International Sdn. Bhd.)

"This course gives me more awareness, that we can save a lot of energy by improving existing installations or systems. There is always room for improvement"

En. Mohd Harus Wagirin (Utility Manager - Petronas Gas Kerteh)

"It is a fantastic training course because it has opened my eyes on Energy Usage. Further I can conduct energy saving activity with confident"

Mr. Sonthar Lingam (Electrical charginan - Panasonic HA Airconditioning Malaysia.)

"Very Beneficial. Highly Recommended"

Mr. Ho Gan Sam (Manager Regional Electrical Engineer Engr.- Petronas Gas Berhad)

Examples of potential SAVINGS identified from the project assignments of PREVIOUS PARTICIPANTS

Company	Savings Achieved (RM/Year)	Project	Payback Period (Month)
Melia Hotel	RM 116,382.00	Lighting	House Keeping
Mitsubishi Electric (M) Sdn Bhd	RM 664,582.00	Lighting, Compressor, A/C, Machine	0 - 10.2 months
BHP Steel (M) Sdn Bhd	RM 1,371,327.00	Tuning of Natural Gas Burners	5.5 months
South East Asia Dev. Corp Bhd	RM 35,239.00	Lift, Air-Cond, Lighting	0 - 15.6 months
Takeuchi MDF Sdn Bhd	RM 208,668.00	Unidirectional segment instead of bi-directional	N/A
Advanced Micro Devices Sdn Bhd	RM 204,073.00 RM 7,190.00	Air-Conditioning Lighting	2 days 1.3 years
DMIB Berhad	RM 24,480.00 RM 209,115.00	VSDs Auto (condensate) drain	1.67 years 35 days

Please contact us if you require further verification on the data.

SOME ORGANISATIONS THAT HAVE BENEFITED FROM THIS PROGRAMME

INDUSTRIAL COURSE

ACP Industries Bhd
Amsteel Mills Sdn Bhd
Bintulu Edible Oils Sdn Bhd
Bintulu Adhesives & Chemicals Sdn Bhd
BHP Steel (M) Sdn Bhd
Bintulu Port Sdn Bhd
Canon Opto (M) Sdn Bhd
Malaysian Oxygen Berhad
Carssem Semiconductor Sdn Bhd
Capetronic (M) Corporation Sdn Bhd
DMIB Berhad
Cement Industries Of M'sia Bhd (CIMA)
F&N CC Beverage Sdn Bhd
Felda Vegetable Oil Products Sdn Bhd
GBH Bathroom Products Sdn Bhd
Petronas Carigali Sdn Bhd
ICI Paints (M) Sdn Bhd
Johnson & Johnson Medical Mfg Sdn Bhd
Kobe Precision Technology Sdn Bhd
Lam Soon (M) Sdn Bhd
Malaysia Shipyard & Eng Sdn Bhd
Mattel (M) Sdn Bhd
Mitsui Copper Foil (M) Sdn Bhd
Petronas Gas Berhad
Petronas Dagangan Berhad
Petronas Penapisan Melaka Sdn Bhd
Southern Steel Berhad
Penang Port Sdn Bhd
Dovatron (M) Sdn Bhd
Epson Precision (Johor) Sdn Bhd
Federal Power Sdn Bhd
Fung Keong Rubber Mfg Sdn Bhd
Intersil Tech (M) Sdn Bhd
Hitachi Chemical (Johor) Sdn Bhd
Perwaja Steel Sdn Bhd
Revertex (M) sdn Bhd
Matsushita Elec. Components (M) S/B
Sandakan Edible Oils Sdn Bhd
Lahat Datu Edible Oils Sdn Bhd
MEMC Electronic Material Sdn Bhd
Sony Mechatronic Pro (M) Sdn Bhd
TNRD Sdn Bhd
Tenaga Nasional Berhad
National Semiconductor Sdn Bhd
Jab Bekalan Elektrik & Gas, M'sia
Malayan Cement Group of Companies
Kelang Multi Terminal Sdn Bhd
Malayawata Steel Bhd
Motorola Malaysia Sdn Bhd
Gas District Cooling Sdn Bhd
Steel Industry Sarawak Bhd
Toshiba Electronics (M) Sdn Bhd
Western Digital (M) Sdn Bhd
Malaysian Newsprint Industries Sdn Bhd
Negeri Sembilan Cement Industries S/B
National Semiconductor Sdn Bhd

BUILDING COURSE

ASSUNTA Hospital
Autotest Engineering Sdn Bhd
Cool Dot Bhd
Dayaurus Sdn Bhd
DBKL
Lembaga Pelabuhan Kelang
HICOM Properties Sdn Bhd
Holiday Inn Kuching
Holiday Inn Resort Damai Beach
Hotel Perdana
Hotel Sofitel Palm Resort & Golf
UiTM
Isetan of Japan Sdn Bhd
EPF
Jab Bekalan Elektrik & Gas M'sia
Kelang Container Terminal Bhd
KL International Airport Berhad
Kuala Lumpur Hilton
Larut Consolidate Berhad
Legend Hotel & Apartments
Makro cash & Carry Sdn Bhd
Malaysia Airport Berhad
Kuala Lumpur Stock Exchange
Melia Hotel
MMC Engineering services Sdn Bhd
Novotel Sg Petani
Pan Pacific Construction Holdings S/B
Pan Pacific Hotel KL
Permodalan Nasional Berhad (PNB)
Pan Pacific Resort Pangkor
Star Publication
Renaissance & New World Hotel
Renaissance Melaka Hotel
Riverside Majestic Hotel
Riviera Bay Resort
Sara Urusharta Sdn Bhd
Sime Darby Bhd & Sime Darby
Plantation
Subang Jaya Medical Centre
South East Asia Dev Corp Sdn Bhd
Sunway Lagoon Resort Hotel
Five-H Associates Sdn Bhd
Tenaga Nasional Berhad
Sunway Lagoon Sdn Bhd
The Legend Resort
The Puteri Pan Pacific Hotel (JB)
Toyo Jitsugyo Sdn Bhd (SOGO)
Redisson Tanjung Rhu
Penang Mutiara Beach Resort
Telekom Malaysia Berhad
Bank Kerjasama Rakyat Malaysia Bhd
Sistem Televisyen M'sia Bhd (TV3)
Bank Negara Malaysia
The Mines Beach and Spa Resort
Eastin Hotel
Awana Kijal Golf and Beach

Certified Energy Manager Training Course

Approved and endorsed by SURUHANJAYA TENAGA



REGISTRATION FORM

INTAKE 2007

Venue : To be Confirm Later
Date(s) : Refer Schedule



Claimable from PSMB under PROLUS Scheme & SBL KHAS

FEES:

- Training course fee @ RM5880 per person
- Early bird @ RM5460 per person***
- Group registration fee: 10% Discount for the 3rd and subsequent registration

All price quoted are inclusive of 5% Government Service Tax

***** Date Line is 2 weeks before training**

Course papers for Session I & II, Luncheon and Refreshments will be provided.

Payment Method:
 Please make your cheque payable to **ECO ENERGY SDN BHD**
 Payment is required within 5 working days on receipt of invoice and must be paid in full before commencement of training.

This is to confirm my /our registration for the above course. My/Our particulars are as below:

<u>Type of Course</u>	<u>ATP No.</u>	<u>Claimable Amount</u>
Certified Energy Manager Training Course	/7522	RM5,200 (Early Bird) RM5,600 (Normal)

****Minimum required qualification :**
 Recognized Engineering Degrees, Diploma or Polytechnic Certificate, Certified Competency in Electrical and Maintenance Engineering, Electrical Supervisor or High Voltage Chargeman

Working Experience: Minimum 3 years
Age: Min. 25 years for Malaysian and Min. 30 years for non-Malaysian

Those without the above qualification are also welcome, but will not be recommended to Suruhanjaya Tenaga as Energy Manager during completion of the course.

(Subject to the previous draft Energy efficiency Regulation)

TO REGISTER: Please complete this registration form and fax it back to:
ECO Energy Sdn. Bhd.
FAX: (603) 6275 8068/TEL: (603) 6275 8187
Contact Person : En. Hamza / En. Azmira
E-mail : emtc@eco-energy.com.my

Intake:						
1. Name:				Position:		
Tel:		Fax:		Email:		
2. Name :				Position:		
Tel:		Fax:		Email:		
Organisation:						
Address:						
Postcode:		City:		State:		
Telephone:		Fax:		E-Mail:		

AUTHORISATION

Signatory must be authorised to sign on behalf of contracting organisation

Name: _____ **Signature:** _____
Position: _____ **Date:** ____/____/____
Tel: _____ **Fax:** _____ **E-Mail:** _____

Notes:

Confirmation: All confirmation are only considered complete when Registration Form and full payment has been received by ECO Energy office. Confirmation of seat must be communicated by writing by ECO Energy and confirmed by the participant. ECO Energy reserves the right to turn down any application which is not deem complete.

Cancellation: All cancellation must be communicated in writing to ECO Energy at least 2 weeks prior to the training, to be entitled a 50% refund on their training fee or can choose to use the refund to attend another training within 6 months of the cancellation. No refund will be forth coming if cancellation are not informed or communicated at least 2 weeks prior to the commencement of the training, however training notes will still be made available upon request. Substitutions of participants are encouraged if the registered participants cannot attend the training.

ECO Energy reserves the right to change the facilities, venue, reschedule or cancel the training due to circumstances beyond our control and all efforts will be taken to inform the participants of the changes.