

COURSE SCHEDULE

DAY 1 : 19 January 2010 - Tuesday

Time	Duration (Minutes)	Session/ Trainers	Subject
0900 – 1200			TC-1 Introduction
0900 – 0930	30	Session 1 (PTM)	Welcome – Opening Remark & Workshop Introduction
0930 – 1030	60	Session 2 (BMC)	1.1 Introduction to Sustainable Energy Management
1030 – 1045	15		<i>Coffee Break</i>
1045 – 1200	75	Session 3 (Local Trainer)	1.2 Definition and role of Energy Manager 1.3 Responsibilities of Energy Manager 1.4 Recommended Code of Practice for Energy Manager
1200 – 1400	120		<i>Lunch</i>
1400 – 1700			TC-2 Setting up a Sustainable Energy Management System
1400 – 1530	90	Session 4 (BMC)	2.1 Effective Tool for Appraising Energy Management Performance of Organization 2.2 Methodology for Preparation of Energy Management System 2.2.1 Energy Policy 2.2.2 Effective Energy Management Committee
1530 – 1545	15		<i>Tea Break</i>
1545 – 1700	75	Session 5 (BMC)	2.2.3 Energy Accounting Centres 2.2.4 Energy Efficiency Index

DAY 2 : 20 January 2010 - Wednesday

Time	Duration (Minutes)	Session/ Trainers	Subject
0900 – 1700			TC-2 Setting up a Sustainable Energy Management System (Cont...)
0900 – 1030	90	Session 1 (BMC)	2.2.5 Working Manual and Tools for Energy Management 2.2.6 Energy Management Working Procedures
1030 – 1045	15		<i>Coffee Break</i>
1045 – 1200	75	Session 2 (BMC)	2.2.7 Investment Appraisal for Energy Efficiency Project 2.2.8 Human Resource Development in Energy Management 2.2.9 Documentation in Energy Management System
1200 – 1400	120		<i>Lunch</i>
1400 – 1530	90	Session 3 (BMC/Local Trainer)	2.3 Setting of Energy Target & Plan 2.3.1 Organizing Energy Audit & Analysis 2.3.2 How to set Energy Target & Plan (ET&P) 2.3.3 Measurement & Verification
1530 – 1545	15		<i>Tea Break</i>
1545 – 1700	75	Session 4 (BMC/Local Trainer)	2.4 Integration of the Energy Management System into Business Practice 2.4.1 Monitoring System 2.4.2 Reporting System 2.4.3 Integration of Energy Management System with other quality or standard system

DAY 3 : 21 January 2010 - Thursday

Time	Duration (Minutes)	Session/ Trainers	Subject
0900 – 1600			TC-3 Managing Activities in Sustainable Energy Management System
0900 – 1030	90	Session 1 (BMC)	3.1 Project Management & Controlling 3.1.1 Project Management & Controlling Techniques 3.1.2 Budget & Resource Management
1030 – 1045	15		<i>Coffee Break</i>
1045 – 1200	75	Session 2 (Local Trainer)	3.2 Energy Management Performance Review 3.2.1 Performance Review – Strategy & Approaches 3.2.2 Conducting Performance Review
1200 – 1400	120		<i>Lunch</i>
1400 – 1545		BMC	Introduction to the Energy Management Simulation Test (EMST)
1545 – 1600	15		<i>Tea Break</i>

DAY 4 : 22 January 2010 - Friday

Time	Duration (Minutes)	Session/ Trainers	Subject
0900 – 0930	30		<i>Refreshment</i>
0930 – 1230	180	BMC	Theoretical Test
1230 – 1400	60		<i>Lunch</i>
1400 – 1700	180	BMC/MA	Practical Test (Energy Management Simulation Test – EMST)
1700 – 1715	15		<i>Tea Break</i>

COURSE INFORMATION

Title : Energy Manager Training Course

Date : 19 January 2010 to 22 January 2010

Organizer

Pusat Tenaga Malaysia (PTM) & Malaysia Energy Professional Association (MEPA)

Venue

Pusat Tenaga Malaysia
No 2, Jalan 9/10,
Pesiaran Usahawan, Seksyen 9,
43650 Bandar Baru Bangi
Selangor Darul Ehsan

Training Overview

Today's global challenge is meeting energy demand in a sustainable way. Access to clean, secure and efficient energy supply has been increasingly important and central concern for policy maker. Effective use of energy could bring about a three-fold impact—improving energy security, reducing energy cost and minimizing adverse environmental impacts due to energy consumption. For business operating in highly competitive global environment, there are pressing needs to maximize operational efficiencies of the equipment and systems installed. New Efficient Management of Electrical Energy Regulation 2008 that has been introduced by Energy Commission required any installation that generated or consumes more than 3 million kWh in 6 consecutive months to appoint registered energy manager. Employment of an energy manager and others requirements in the regulation is part of a Sustainable Energy Management. This training program objective is to introduce participants the whole concept of a Sustainable Energy Management. Sustainable Energy Management covers all aspects of energy consumption in the organization and involves not only machines or equipment that consumes energy but also look for the best contribution from end users.

Training Objective

Energy Manager Training Course has been designed to provide the proven approach toward sustainable energy management to all participants. It is important for Energy Manager to understand and apply the knowledge of sustainable energy management in their daily works. Specific objective for the training can be defined as below;

Part I – Training on Code of Practice for Energy Manager:

All participants will:

- Understand their role and responsibility as an Energy Manager
- Understand ethics and professionalism of an Energy Manager

Part II – Training on Sustainable Energy Management:

All participants will be able to:

- Set up a sustainable energy management system in their organization
- Work as an “Energy Management Champion” to successfully manage all activities in sustainable energy management system.
- Acquire knowledge and skills in practicing as an Energy Manager
- Integrate sustainable energy management into business practice.

Training Course Outline

The training course outline has been designed based on concept of “Systematic approach to energy management best practice”. The course outline consists of three main sessions, as follows;

Session I Code of Practice for Energy Manager

This session aims to provide the understanding on how to work as a professional energy manager. Main subjects of this session are;

- Definition and role of Energy Manager
- Responsibilities of Energy Manager
- Basics of Ethics and Professionalism

Session II Setting of Sustainable Energy Management System

This session covers key areas to build sustainable energy management system in the organization. Main subjects of this session are;

- Introduction to Sustainable Energy Management
- Appraising Energy Management Performance
- Preparation of Energy Management System
- Setting Energy Target & Plan
- Integration of Energy Management System into Business Practice

Session III Managing Activities in Sustainable Energy Management System

This session aims to provide the practical guidelines on how to manage all activities in the energy management system after completion of the setting process to ensure the sustainable achievement of the system. Main subjects of this session are;

- Project Management and Controlling
- Energy Management Performance Review

At the end of the training, a **Professional Assessment** will be conducted to assess the understanding of each participant. The assessment consists of two parts as follow;

Part I

Theoretical Test: Using multiple choices and qualitative questions to assess the understanding in three main areas; Code of Practice, Energy Management Concept and Role & Responsibility of Energy Management Champion

Part II

Practical Test: Using **Energy Management Simulation Test (EMST)**, a computer simulation software that has been designed to simulate energy management in a virtual organization. Participants have to apply their knowledge in sustainable energy management to work through EMST and achieve certain points to pass minimum requirements.

Trainers

1. Mr. Kamol Tanpipat

Sr.Energy Management Expert
Assistant Managing Director
Bright Management Consulting Co.,Ltd.

Mr. Kamol possesses more than 15 years experience in managing engineering consulting projects and more than 10 years of direct experience in implementing energy conservation and energy management project for major industrial and commercial sectors in Thailand. He worked as project manager, trainer and instructor in several consulting projects for Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy, Thailand. He was a co-project manager and acting as senior technical advisor for ASEAN project in the development of theoretical training curricula for energy managers and training providers in ASEAN funded by EC-ASEAN Energy Facility.

2. Mr. Jirayut Charoenchatchai

Sr.Energy Management Expert
Divisional Manager: Energy Efficiency
Bright Management Consulting Co.,Ltd.

Mr.Jirayut worked as project manager and senior energy consultant for more than 80 factories and buildings in Thailand. He has direct experience in conducting of energy audit and analysis for factories and buildings for more than 10 years. He was a trainer and instructor in several consulting projects for Department of Alternative Energy Development and Efficiency (DEDE), Ministry

of Energy, Thailand. He was a qualified trainer attending the train the trainer course under the development of theoretical training curricula for energy managers and training providers in ASEAN project conducted in Bangkok. He was an assistant project manager and co-instructor for the third country training programme on energy conservation to reduce global warming for ASEAN countries funded by Japan International Cooperation Agency (JICA) and Thailand International Development Agency (TICA), organized by DEDE.

3. Mr. Kunjit Jamekorn

Sr. Energy Management Expert

- Senior Engineer,

Siriraj Hospital, Mahidol University Bangkok, Thailand

- Instructor

Master of Business Administration (Environmental Management) St. John's University Bangkok, Thailand

Mr. Kunjit has worked as senior engineer at Siriraj Hospital for more than 10 years. The Siriraj hospital is the biggest hospital in Thailand and in South East Asia with more than 2,300 beds. He has direct experience in conducting, managing and implementing of engineering improvement projects for more than 10 years. Also he emphasizes in training courses such as LEAN Management training, Balance Scorecard training for back office staffs. He commits the job as trainer for Facility Management and Safety (FMS) under Joint Commission International (JCI) for Health Care Facility that leads him to manage and participate in maintenance teams, back offices and engineers in the hospital. He is a trainer and instructor on general management, environmental management and energy management topics on Master of Business Administration (Environmental Management) course at St. John's University Bangkok, Thailand for more than 10 years. He was one of the development team under the development of theoretical training curricula for energy managers and training providers in ASEAN funded by EC-ASEAN Energy Facility.

4. Prof. Dr. Zainuddin bin Manan, Universiti Teknologi Malaysia

Dr. Zainuddin Abdul Manan is an Energy Professional, a Professor and the Founding Director of Process Systems Engineering Centre (PROSPECT), University Teknologi Malaysia (UTM), Skudai, Johor. He has a B.Sc. in Chemical Engineering from University of Houston, USA, an MSc in Process Integration from Centre for Process Integration, UMIST, UK, and PhD in Chemical Engineering from Univ of Edinburgh, Scotland. He has worked as a production engineer with Hume Industries. For 15 years, he has been extensively involved as a researcher, consultant and trainer for chemical process industries in the area of process systems engineering with emphasis on efficient energy utilization (pinch analysis) and waste minimization. He has completed over 40 research and consultancy projects involving petrochemicals, fine chemicals, pulp and paper and food production industries in Malaysia and abroad. He is also an experienced instructor for professional courses related to chemical and process engineering, having taught over 250 companies nationwide.

Training Benefits

- Better control and maintain saving result
- Lower energy costs
- Reducing operation & Maintenance cost
- Reducing carbon emissions
- Improved working conditions
- Ensures legislative compliance (New Regulation)
- Support other quality system such as ISO 14001 accreditation, Total Quality Management, TPM etc.
- Demonstrates corporate & social responsibility
- Upgrade MEPA membership status

Training Fee

For the four (4) days intensive training, the course fee are as follows (inclusive of course materials, provision of facilities for practical sessions, refreshments and lunch):

MEPA Members : Free of Charge
Non Members : RM 3800.00

Confirmation of the registration is upon receipt of the payment. All payment shall be made by cross cheque made payable to "PUSAT TENAGA MALAYSIA" or direct bank-in to the CIMB Bank Berhad account no: 1215-0010842-059. Please send the cheque or the payment slip together with the completed Application Form to PTM. Kindly note that the payment is not refundable, however it is transferable.

Pre-requisites for Course Admittance

Prerequisites for participants:

- i. Age above 21 years
- ii. At least holder of Degree in Engineering, Science or its equivalent in any discipline
- iii. Proficient in English

If there are some potential participants that would like to attend the training and do not have these qualification, the potential participants must discuss this with PTM before this participant will be allowed to attend the course.

Application

Please download the application form from the website and fax it to PTM. If you have responded to an advertised course then you must complete the attached application form and send it to PTM (address on the form) and you will then be notified if successful in the application. The seat is limited and all application will be serve as first come first serve basis. During the course all lunches and morning/afternoon teas will be provided by PTM.

Application Form

ENERGY MANAGER TRAINING COURSE



Please complete this form and fax to us at 03 - 8921 0802, Attn Khairul Anuar Mukhtar

Full Name	
Position	
I/C No	
Contact No	
Email	
Organization Name	
Adress	
Tel No	
Fax No	
Person In Charge	
Signature/ Company Stamp	

Any further Inquiries please contact:

Pusat Tenaga Malaysia

No 2, Jalan 9/10

Persiaran Usahawan, Seksyen 9

43650 Bandar Baru Bangi

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