



## *Keynote Presentation*

# The Diamond and ISO 50001

Review of EMEER 2008 and ISO 50001  
towards  
performance excellence branding

*Calling for operational innovation*

# The Energy Commission Diamond Building



## Background:

Concept of a sustainable building with consideration to the following aspects:

1. reduction in fossil fuels
2. water conservation
3. sustainable building materials
4. waste minimisation and avoidance
5. indoor environmental quality
6. traffic and transport management

## Design Concept:

This building is inspired by the original form of the diamond, which form symbolises transparency, value and durability; characteristics which represent the Energy Commission's role and mission as the **Efficient Energy Management** promoter.

This building is expected to have an energy index of 85 kWh/m<sup>2</sup>/year, in contrast with the standard index of 135 kWh/m<sup>2</sup>/year (MS1525).

*The Energy Commission headquarters is located at:  
Precinct 2, Putrajaya adjacent to Taman Pancarona, a public landscape garden.*

# **EMEER 2008**

## **(Efficient Management of Electrical Energy Regulations 2008)**

### **Overview**

**1. EFFECTIVE DATE: 15 December 2008**

**2. SCOPE: Energy User consuming more than 3,000,000 kWh/6 month**

**3. REQUIREMENTS:**

- To appoint or designate a registered electrical energy manager;**
- To submit a written confirmation of such appointment or designation (name, particulars, date of expiry of registration)**
- To submit information :**
  - **the statement of policy for efficient electrical energy management of the installation**
  - **the objectives of efficient electrical energy management**
  - **the accounts and documents pertaining to efficient electrical energy management**
- To submit reports - in Form A “Energy Consumption Report” and Form B “Declaration by the registered electrical energy manager”**
- To submit any other information which the Commission may require.**

# **EMEER 2008**

## **(Efficient Management of Electrical Energy Regulations 2008)**

### **Overview**

#### **REGISTERED ELECTRICAL ENERGY MANAGER**

#### **1. QUALIFICATION REQUIREMENTS**

- Malaysian citizen aged 23 years and above; and**
- Professional Engineer and possesses at least six months working experience in the efficient management of electrical energy, or**
- Holds a degree in Science, Engineering, Architecture or its equivalent and possesses at least one year working experience in the efficient management of electrical energy; or**
- Holds a certificate of competency as an Electrical Services Engineer or as a Competent Electrical Engineer as in the Electricity Regulations 1994 and possesses at least nine months working experience in the efficient management of electrical energy; and**
- Demonstrates knowledge of the requirements of the Act and these Regulations**
- The Commission may require the person to attend an interview.**

# **EMEER 2008**

## **(Efficient Management of Electrical Energy Regulations 2008)**

### **Overview**

#### **REGISTERED ELECTRICAL ENERGY MANAGER**

### **2. FUNCTIONS AND DUTIES**

- To audit and analyse the total electrical energy consumption or generation**
- To advise in developing and implementing measures to ensure efficient management of electrical energy at the installation**
- To monitor effective implementation of the measures**
- To supervise the keeping of records on efficient management of electrical energy at the installation and verify its accuracy;**
- To ensure the timely submission of information and reports under the regulations.**

# ISO 50001

INTERNATIONAL  
STANDARD

**ISO  
50001**

***The standard prime purpose is to:***  
**Continually improve energy performance in  
the energy use organisation**

First edition  
2011-06-15

**Energy cost reduction before certification**

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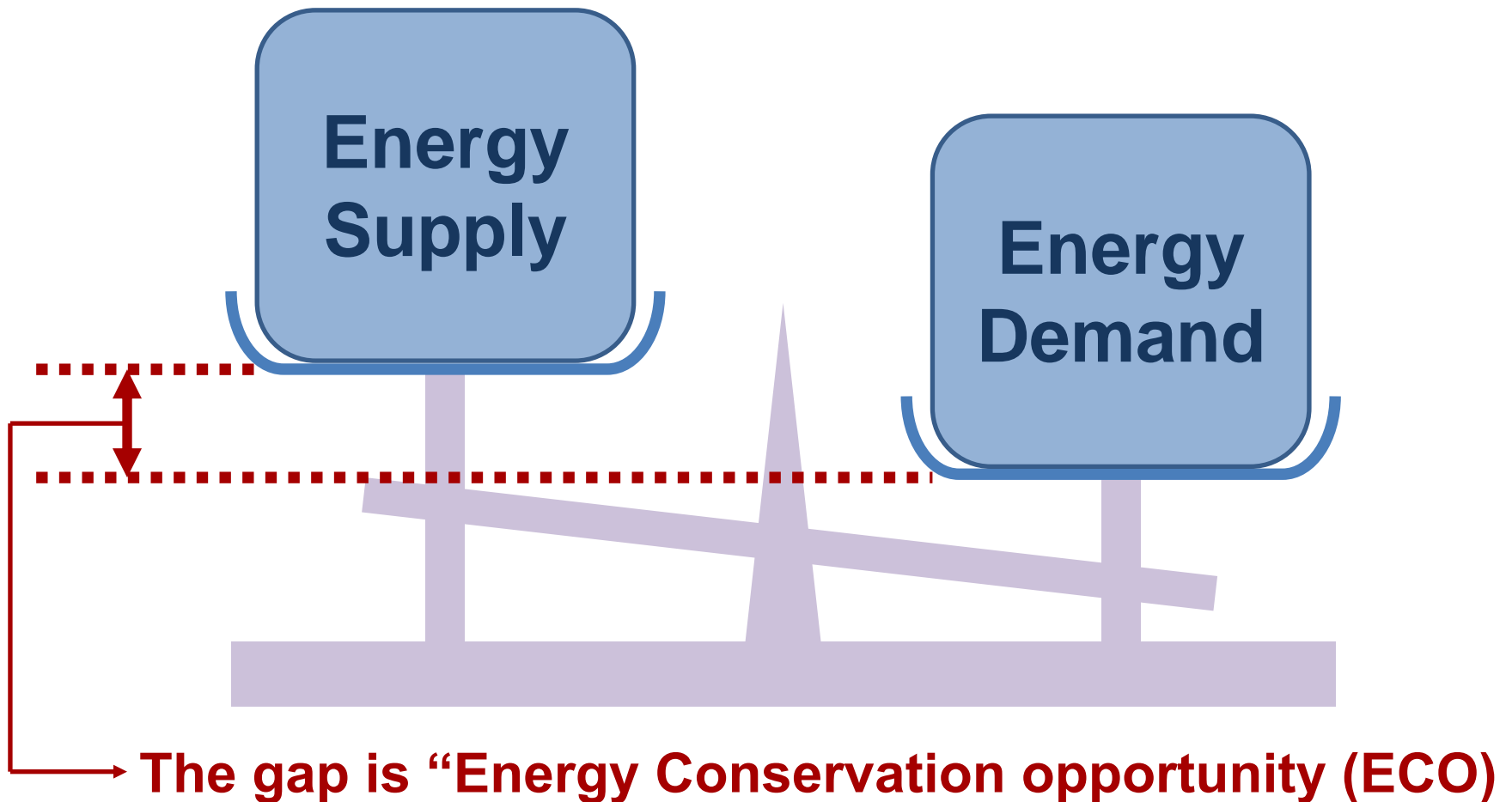
**Energy management systems —  
Requirements with guidance for use**

*Systèmes de management de l'énergie — Exigences et  
recommandations de mise en œuvre*



# Energy Balance...

*is name of the game*



# **EMEER 2008-ISO 50001**

## ***Objective:***

### **Energy Performance Improvement**

**Establish and implement EEEM(EnMS) operation with:**

- 1. Top Management Involvement**
- 2. Energy Policy**
- 3. Appointment of Person responsible for EnMS and EEM**
- 4. Energy Review and identification of EnPI and ECO**
- 5. Action Plan**
- 6. Energy Monitoring and Saving Verification**
- 7. Training and awareness programs**
- 8. Communication**
- 9. Operation and Document Control**
- 10. EE Procurement**
- 11. EnMS Audit**
- 12. Management review**
- 13. Periodic Reporting to ST**



# Role and Responsibility



# Suruhanjaya Tenaga

- ❑ Fully operational on 1 January 2002 and assumed all the responsibilities of the Department of Electricity and Gas
- ❑ The energy sector in Malaysia has undergone significant changes since the 1990.
- ❑ This was driven by the Government's aim to enhance supply security, improve efficiency and quality in utility services and increase the private sector's participation in infrastructure development.
- ❑ Major Acts and Regulations are as follows
  1. Electricity Supply Act 1990 (Amendment) 2001
  2. Gas Supply Act 1993 (Amendment) 2001
  3. Licensee Supply Regulations 1990 (Amendment) 2002
  4. Electricity Regulations 1994 (Amendment) 2003
  5. Gas Supply Regulations 1997 (Amendment) 2000
  6. Electricity Supply (Compounding of Offences) Regulations 2001
  7. Gas Supply (Compoundable Offences) Order 2006
  8. Efficient Management of Electrical Energy Regulations 2008

*What we expect from you and your organisation  
by participating this special*

## **Workshop**

- **Energy Performance Improvement in your organisation**
- **Understand EMEER 2008 and ISO 50001 are to help your organisation improve performance and profitability, and business sectors to take competitive edge globally.**
- **Top management involvement is vital to have successful EnMS operation. We urge your to make full report of what you have learned from this workshop to your managements and make sure they understand.**
- **Workshop covers the energy performance indicator (EnPI) which is very critical in verify savings. We urge you to master it.**
- **Strengthen the REEM position in your organisation**
  - **Want participants after learning experience from the workshop to take leadership in your organisation to achieve your objectives and targets (Promising career for you)**
  - **We recognise the value of this workshop and therefore award 8 CPD credits for maintaining the qualification status for Registered Electrical Energy Manager (REEM)**

## Final note:

- ❑ This workshop is very unique in a sense that it provides practical experience of how to improve energy performance in your organisation through operational aspects
  - ❑ It provides ISO 50001 class key documentation. This makes your life easier for establishing and implementing ISO 50001 class EnMS
  - ❑ You will learn how to set baseline and targets quantitatively. This is really fun learning
  - ❑ The session runs with EnMS operation and documentation control system using MediaWiki framework. It make the EnMS very efficient and effective with complete paperless environment
- Enjoy the workshop and enhance knowledge***

# **Any inquiry to Suruhanjaya Tenaga Related to EMEER2008 and ISO 50001**

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***Thank You***