

MALAYSIA

Country Report on Energy Code
and ASEAN Energy Award

OUTLINE

01

INTRODUCTION

- New Ministry structure in Malaysia 2018

02

BUILDING ENERGY CODE

- Malaysia Standard
- Energy Efficiency & Conservation Act (EECA)
- Building Energy Label for Government Buildings
- Green building rating tools

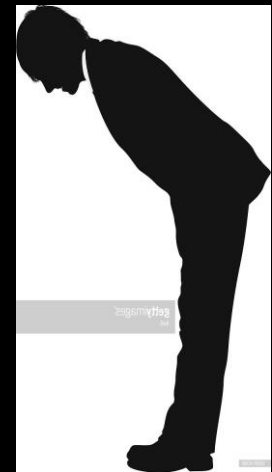
03

ENERGY AWARDS

- Malaysia National Energy Awards (NEA) 2018
- Asean Energy Awards (AEA) 2018
- ZEB Family Concept

04

THANK YOU



Ahmad Firdaus



(Green Technology & Energy component)



(Entire component)



(Climate Change & Environment Component)



After the general election to 14 (PRU-14), Ministry has been restructured and formed the Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC)



BUILDING ENERGY CODE

MS 1525: CODE OF PRACTICE ON EE AND USE OF RE FOR NON-RESIDENTIAL BUILDINGS

- This code of practice gives guidance on the effective use of energy including the application of renewable energy in new and existing non-residential buildings.

MS 2680 CODE OF PRACTICE ON EE AND USE OF RE FOR RESIDENTIAL BUILDINGS - 2017

- To guide on the design, selection of materials and electrical appliances and efficient use of energy including the application of renewable energy in new and existing residential buildings.



Voluntary Basis

MS 1525: 2014

MS 2680: 2017

ENERGY EFFICIENCY & CONSERVATION ACT (EECA)

01

Minimum Energy Performance Standards (MEPS)

- ✓ Domestic Appliances
- ✓ Industrial Equipments

02

Efficient Management of Electrical Energy Regulation (EMEER)

- ✓ Energy Manager
- ✓ Energy Service Company

03

Building Sector

- ✓ Building Codes
- ✓ Building Labelling

04

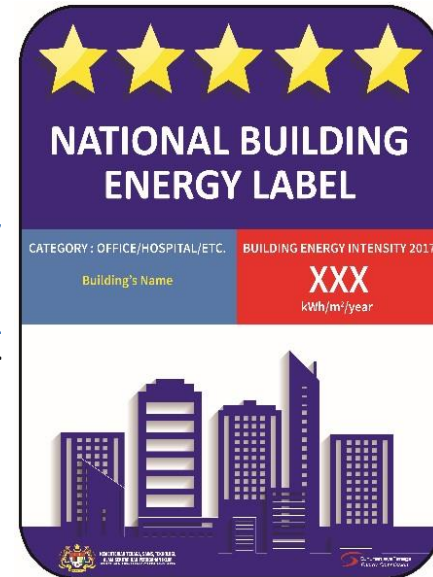
Thermal Energy

- ✓ Co-Generation
- ✓ Gas District Cooling
- ✓ Solar Thermal

NATIONAL BUILDING ENERGY LABELLING FOR GOVERNMENT BUILDINGS



Building category:
Office/
Hospital/
University/
School & etc.



Star range:
1 Star: Less efficient
5 Star: Most efficient

Building Energy Performance Unit:
kWh/m²/year

Phase 3 3,000+

Government Buildings:
• Office
• Hospitals
• Universities
• Polytechnics
• Schools

STAR	*BEI Range
5-Star	$BEI \leq 100$
4- Star	$100 < BEI \leq 130$
3- Star	$130 < BEI \leq 160$
2- Star	$160 < BEI \leq 250$
1- Star	$BEI > 250$

**BEI range for office building*

Phase 2

1,900

Government Buildings:
• Office
• Hospitals
• Universities
• Polytechnics
• Schools

Phase 1

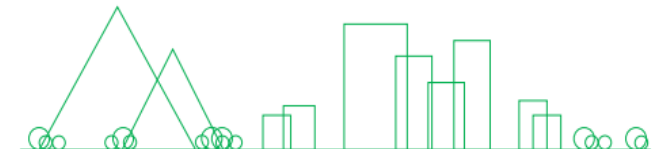
100

Government office buildings
• NFA > 8,000 m²; and or
• > 1million kWh/year



GREEN BUILDING RATING TOOLS

- Voluntary Basis



NATIONAL ENERGY AWARDS 2018

**EEB &
GB** (7)

EM (31)



ASEAN ENERGY AWARDS 2018

CATEGORY	NATIONAL ENERGY AWARDS	ASEAN ENERGY AWARDS
ENERGY MANAGEMENT		
SMALL AND MEDIUM		
1. Buildings	i. Cofreth (M) Sdn Bhd HQ ii. KPJ Kluang Utama Specialist Hospital	1st Runner-Up
2. Industries	i. Dutch Lady Milk Industries Sdn Bhd ii. Top Glove Sdn Bhd	2nd Runner-Up
LARGE		
1. Buildings	i. Public Works Department HQ ii. Kota Kinabalu International Airport	Winner
2. Industries	i. IOI Edible Oils Sdn Bhd ii. BP Petronas Acetyls Sdn Bhd	2nd Runner-Up
SPECIAL SUBMISSION		
GREEN BUILDING & ENERGY EFFICIENT BUILDING		
GREEN BUILDING		
1. Small and Medium		
2. Large	i. PKNS HQ ii. Amanjaya Specialist Centre	Winner 2nd Runner-Up
NEW AND EXISTING BUILDING	i. PKNS HQ	
TROPICAL BUILDING		
RETROFITTED BUILDING	i. Pejabat Perdana Menteri ii. Putra Specialist Hospital Sdn Bhd	1st Runner-Up
SPECIAL SUBMISSION		
JUMLAH	13	7

ZEB FAMILY CONCEPT IN MALAYSIA

- During IGEM 2018 in Kuala Lumpur recently, Malaysia had signed a Memorandum of Understanding (MoU) with Japan which between Sustainable Energy Development Authority (SEDA) and The Japanese Business Alliance for Smart Energy Worldwide (JASE).



THANK YOU