

Energy Efficiency & Conservation Department Energy Commission

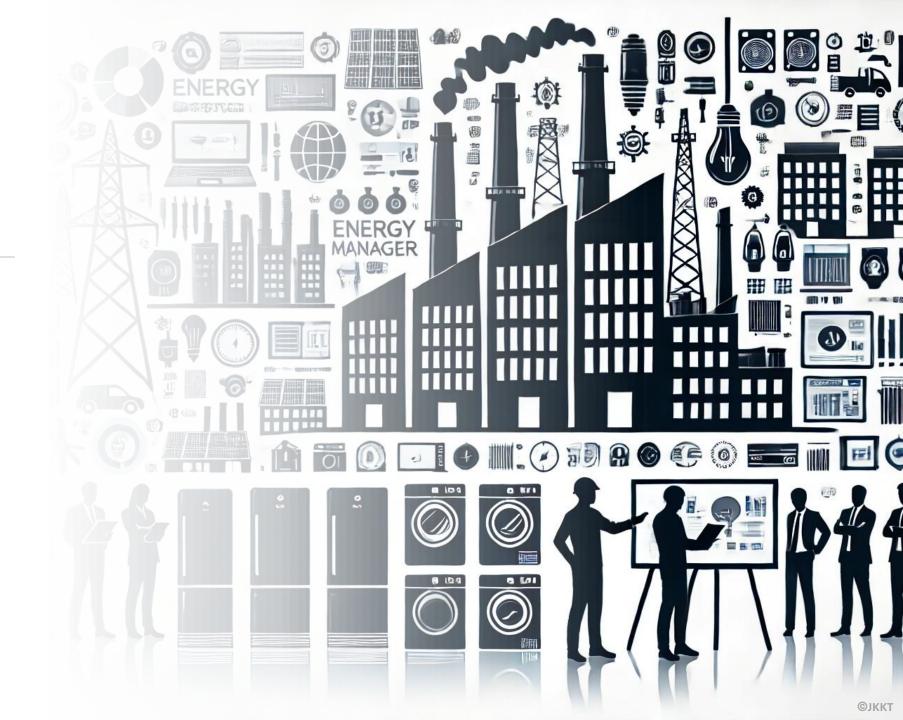








### EECA OVERVIEW



#### **OBJECTIVES OF EECA DEVELOPMENT**

**LEGISLATION** 

The need to have comprehensive legislation to drive energy efficiency. (Results from 2017 Prelim-DSM Study by EPU).



EE INITIATIVES

To improve energy efficiency initiatives in industry, commercial and residential sector.



REDUCE CARBON EMISSION

To reduce 45% of carbon emission pledged in COP21 (Paris Agreement) by 2030 based on 2005 level.



CARBON NEUTRALITY

To support the government's aspiration to achieve carbon neutrality by 2050.

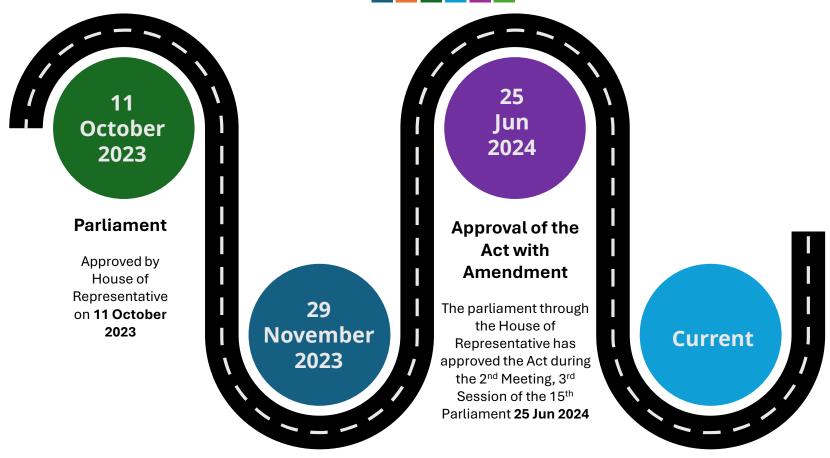


ENERGY OPTIMIZATION

To effectively manage energy demand, promoting efficient and sustainable energy consumption practices.



#### **CURRENT STATUS OF EECA**



#### Proposal on the Amendment of the Act

Proposed by the senator from Sarawak to the Speaker of the House of Senate on the **29 November 2023** 

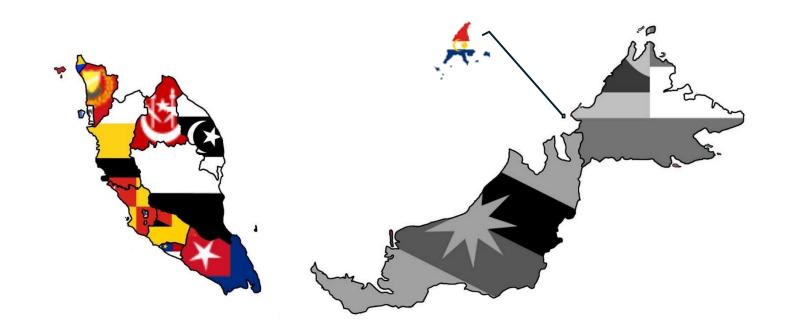
Amendment proposal to the Section 1(3) of the Act to exclude the application of the Act to Sarawak.

### Process of Gazetting the EECA

Currently the EECA is in the final process of getting the **royal assent** from the Yang diPertuan Agong (YDPA).

### APPLICATION OF THE EECA

#### EECA shall apply to **Peninsular Malaysia** and **Federal Territory of Labuan**





#### D.R. 28/2023

#### RANG UNDANG-UNDANG KECEKAPAN DAN KONSERVASI TENAGA 2023

SUSUNAN FASAL

BAHAGIAN I PERMULAAN

asal

- 1. Tajuk ringkas dan permulaan kuat kuasa
- Tafsiran
- Pemakaian

Bahagian II

FUNGSI DAN KUASA SURUHANJAYA

4. Fungsi dan kuasa Suruhanjaya

BAHAGIAN III

KEWAJIPAN PENGGUNA TENAGA

- 5. Pelantikan pengurus tenaga berdaftar
- 6. Sistem pengurusan tenaga
- 7. Laporan kecekapan dan konservasi tenaga
- Audit tenaga
- 9. Laporan audit tenaga

Bahagian IV

KEWAJIPAN ORANG YANG BERTANGGUNGJAWAB BAGI BANGUNAN

- 10. Label intensiti tenasa
- 11. Mempamerkan label intensiti tenaga
- 12. Pengubahan, pemalsuan, dsb., label intensiti tenaga

#### **Bahasa Malaysia Version**



**SCAN ME** 

https://bit.ly/eeca24\_my

#### ENERGY EFFICIENCY AND CONSERVATION BILL 2023

ARRANGEMENT OF CLAUSES

PART I

PRELIMINARY

Clause

- 1. Short title and commencement
- 2. Interpretation
- 3. Application

PART I

FUNCTIONS AND POWERS OF THE COMMISSION

4. Functions and powers of the Commission

PART III

DUTIES OF ENERGY CONSUMER

- 5. Appointment of registered energy manager
- 6. Energy management system
- 7. Energy efficiency and conservation report
- Energy audit
- 9. Energy audit report

PART IV

DUTIES OF PERSON IN CHARGE OF BUILDING

- 10. Energy intensity label
- 11. Display of energy intensity label
- 12. Alteration, forgery, etc., of energy intensity label
- 3. Energy intensity performance
- 14. Energy audit report in respect of building
- 15. Energy efficiency improvement plan
- 16. Non-application of sections 13, 14 and 15

#### **English Version**



**SCAN ME** 

https://bit.ly/eeca24\_eng

#### **EECA STRUCTURE**



#### **APPLICATION**

01

02

03

04

#### **ENERGY CONSUMER**

Subjected to energy consumer that meets the minimum prescribed threshold of **21,600GJ annually**.

(Equivalent to about RM 1.0 Million for Natural Gas & RM 2.4 Million for Electricity)



#### BUILDING

Subjected to buildings as specified in Third Schedule of the Act which states the type of building subjected under this Act and meet criteria set out in the Guideline. Currently, Schedule 3 states Office Building will be subjected to the Act.



#### ENERGY USING PRODUCTS

Requirement to obtain Certificate of Registration (COR), Certificate of Efficiency (COE) and to be affixed with an energy efficiency rating label



#### REGISTRATION OF ENERGY MANAGER, ENERGY AUDITOR & TRAINING INSTITUTION

Application for registration of:

- 1. Energy Manager (Type 1 & Type 2)
- 2. Energy Auditor
- 3. Training Institution





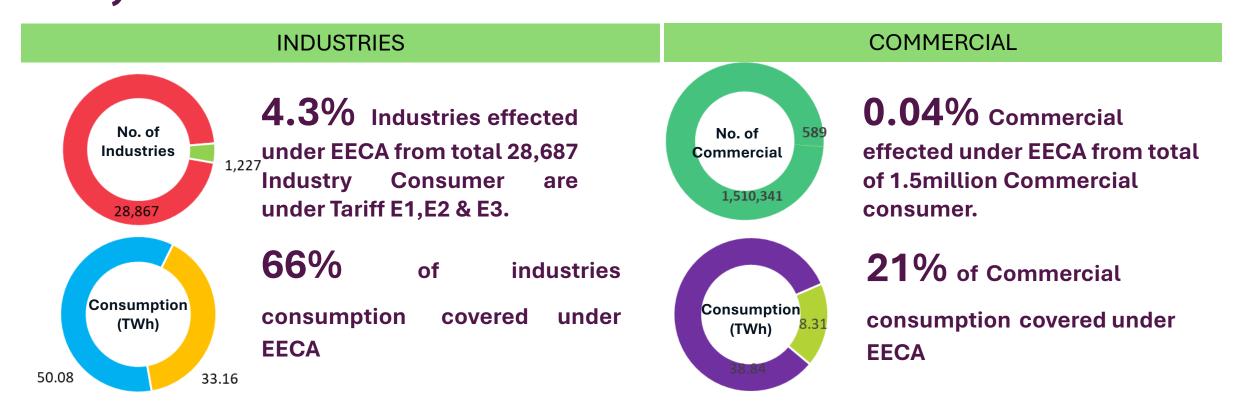


# **ENERGY CONSUMER**



#### **Application of EECA to Energy Consumer**

21,600GJ over twelve consecutive months is the energy consumption threshold



All Industry & Commercial installations to be regulated under EECA are currently regulated under EMEER 2008

#### **ENERGY CONSUMER**

Obligation



#### REGISTERED ENERGY MANAGER

Required to appoint a Registered Energy Manager



#### **ENERGY MANAGEMENT SYSTEM**

Required to **develop and implement mandatory energy management system** 



### ENERGY EFFICIENCY AND CONSERVATION REPORT

Periodic submission of annual energy efficiency and conservation report



Any energy consumer whose energy consumption for a period of **twelve consecutive months** equals to or exceeds **21,600 gigajoule.** 



Required to conduct mandatory periodic **energy audit by a Registered Energy Auditor** and submission of **energy audit report** 



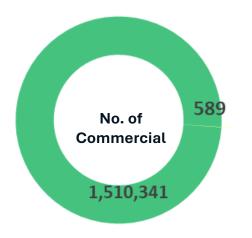


## **BUILDING**



#### **Application of EECA for Building**

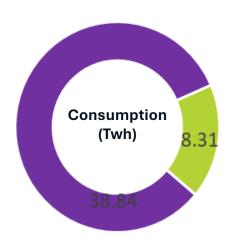
Any building as described in 3<sup>rd</sup> Schedule and details will be specified in the Guideline. For a start only office building with a criteria of Gross Floor Area of 8,000 m<sup>2</sup> and above will be enforced under the act



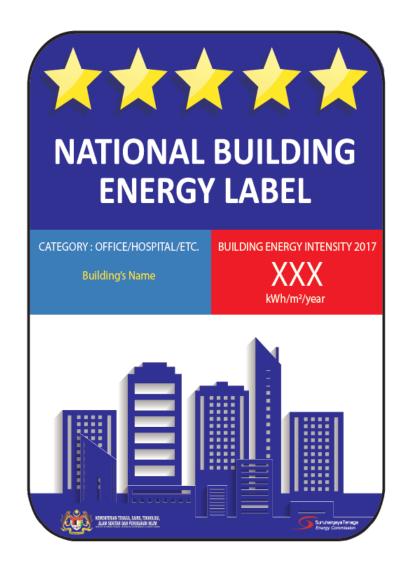
**0.04%** Commercial effected under EECA from total of 1.5million Commercial consumer.



consumption covered under EECA are from effected Commercial covered under EECA.



79% of remaining commercial consumption can be covered via building efficiency requirements such as Building Energy Intensity Labelling (BEI Label).







#### ENERGY INTENSITY LABEL

Requirement to **label the building** with an **Energy Intensity Label** and the person in charge of the building is required to apply for a new label annually.

Energy Intensity Label will define the building's energy intensity performance and its star rating.



### MINIMUM ENERGY INTENSITY PERFORMANCE

Required to comply with the minimum energy intensity performance within the period prescribed in the regulations.

Any non-compliance with the minimum energy intensity performance, the person in charge of the building is required to appoint registered energy auditor to conduct the energy audit and submit energy audit report together with the improvement plan.



Buildings as **specified** in **Third Schedule** of the Act and meet **criteria** set out in the **Guideline**.

| Act       | Third Schedule | Office Building           |
|-----------|----------------|---------------------------|
| Guideline | Criteria       | GFA ≥ 8000 m <sup>2</sup> |

BUILDING ENERGY INTENSITY RANGE







Current Implementation of Building Energy Intensity Star Rating Table for Government Offices





# ENERGY USING PRODUCTS



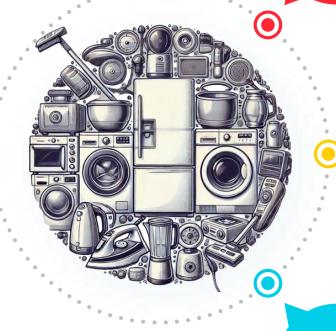
#### **ENERGY USING PRODUCTS**

Obligation



### CERTIFICATE OF REGISTRATION

Requirement for **Manufacturers and Importers** to obtain **Certificate of Registration (COR)** 





### CERTIFICATE OF EFFICIENCY

Requirement for **energy using product** to meet the prescribed **minimum requirement** and obtain a **Certificate of Efficiency (COE)** 



| Energy using product as specified in the guideline |                      |  |  |
|----------------------------------------------------|----------------------|--|--|
| Air Conditioner                                    | Washing Machine      |  |  |
| Refrigerator                                       | Microwave Oven       |  |  |
| Domestic Fan                                       | Electric Rice Cooker |  |  |
| Lamps                                              | Freezer              |  |  |
| Television                                         | Electric Oven        |  |  |

### ENERGY EFFICIENCY RATING LABEL

Requirement for **energy using product** in the domestic, commercial and industrial sector to be **affixed** with an **energy efficiency rating label.** 

Any energy using product as specified in the guidelines.











### REGISTRATION OF ENERGY MANAGER, ENERGY AUDITOR & TRAINING INSTITUTION



## REGISTRATION OF ENERGY MANAGER, ENERGY AUDITOR & TRAINING INSTITUTION



### REGISTRATION OF ENERGY MANAGER

Registration of Energy Manager to **carry out function and duties under the Act** such as monitor the implementation of the energy management system by the energy consumer, prepare the energy efficiency and conservation report for the energy consumer and others.

### REGISTRATION OF ENERGY AUDITOR

Registration of Energy Auditor to **conduct the mandatory energy audit** and **prepare energy audit report.** 

### REGISTRATION OF TRAINING INSTITUTION

Registration of Training Institutions to conduct a training course for any person who intends to be a Registered Energy Manager and carry out a Continuous Development Programme (CDP) for Registered Energy Manager





# ENERGY EFFICIENCY & CONSERVATION REGULATIONS

#### **ENERGY EFFICIENCY & CONSERVATION REGULATIONS**

Details on appointment of REM Type 1 and Type 2

Limitation on Appointment of Registered Energy Manager

Details on step to be taken if position of REM vacated

Details on implementation of energy management system

Details on submission of energy efficiency and conservation report

Details on submission of energy audit report

Details on application of building energy intensity label and building energy rating

Qualification of Registered Energy Manager Type 1 and Type 2

Qualification of Registered Energy Auditor

Details on compoundable offences

Details on fee





## EECA GUIDELINES



#### **EECA GUIDELINES**

#### **Guideline on Energy Management System**

This guideline explains on requirement and details of Energy Management System that need to be implemented by Energy Consumer.

### Guideline on Energy Efficiency & Conservation Report

This guideline states the format and information that must included in EEC Report that need to be submitted in the by Energy Consumer

#### **Guideline on Energy Audit Report**

This guideline states the format and information that must included in Energy Audit Report that need to be submitted in the by industries and buildings.

#### Guide on Registration for Energy manager, Energy Auditor and Training institutions

This 3 guide will state the procedure on REM,REA and training applications and renewal application.



#### Guideline on Ascertaining Building and Energy Intensity Performance of The Building

This guideline will state the criteria for building that will be subjected under the Act, building labelling requirements and calculation methodology of building energy intensity.

#### **Guideline On Energy Using Product**

This guideline will state the list of energy using product subjected under this Act, application and renewal of certificate of efficiency procedure, calculation methodology of energy efficiency, energy efficiency labelling requirements and testing methodologies of energy-using products

### **Guideline On Ascertaining Energy Consumer**

This guidelines state the methodology and requirement in determination of energy consumer.

### Guideline On Function and Duties of Registered Energy Manager

This guidelines state the function and duties that must be carried out by REM.



## THANK YOU

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