



ECAP 17

PHILIPPINES

AARON R. PREMADIO

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TOKYO, JAPAN



Green Building Code

SOME INFO

- Department of Public Works & Highways (DPWH) is the initiator and the main implementer of Green Building Code, with assistance from a member of the World Bank Group – International Finance Corporation, technical support from Philippine Green Building Initiative, and inputs from national agencies which includes the Department of Energy (DOE)
- Signed by the DPWH Secretary last June 25, 2015 and became effective on February 2, 2016
- A Full Text and User Guide was published on June 2016

DEFINITION

- Philippine Green Building Code is the practice of increasing efficiency with which buildings and their sites use energy, water and materials --- as well as reducing a building's impacts on human health and the environment, through improved design, construction and management.



Philippine Green Building Code

FOCUSING ASPECTS

- A. Energy Efficiency
 - A.1 Building Envelope*
 - A.2 Mechanical Systems*
 - A.3 Electrical Systems*
- B. Water Efficiency
 - B.1 Water Fixtures*
 - B.2 Rainwater Harvesting*
 - B.3 Water Recycling*
- C. Material Sustainability
 - C.1 Non-Toxic Materials*
- D. Solid Waste Management
 - D.1 Materials Recovery Facility*
- E. Site Sustainability
 - E.1 Site/Ground Preparation and Earthworks*
 - E.2 Open Space Utilization*
- F. Indoor Environmentally Quality
 - F.1 Minimum Fresh Air Rates*
 - F.2 Designated Smoking Areas*



Philippine Green Building Code

SCOPE

- New Construction Buildings *
- Altered / Modified / Any expansion of buildings with Total Gross Floor Area of the following **

CATEGORY	TOTAL GROSS FLOOR AREA (m ²)
Residential / Condominiums	20,000 m ²
Hotels	10,000 m ²
Schools	10,000 m ²
Hospital	10,000 m ²
Offices	10,000 m ²
Malls / Retail	15,000 m ²
Mixed Use	10,000 m ²

NOTE:

* *The Code does not apply to buildings of the above use/occupancy classification constructed before its effectivity*

** *When alterations, additions, conversions, and renovations of existing buildings constructed after the effectivity of the Code fit with the minimum TGFA, the whole building shall be subject to the applicable provisions of the GB Code.*

- Provides regulations to set minimum standards for compliance and is not intended to rate buildings
- It is a referral code of the National Building Code



Minimum Energy Performance (MEP)

- a specification containing a number of performance requirements for an energy-consuming facility that effectively **limits the maximum amount of energy** that may be consumed by a particular establishment in performing their operations **without reducing output or productivity.**



It is usually made mandatory by a government energy efficiency body to ensure that general performance is not adversely affected by increasing energy efficiency.

Department Circular entitled:



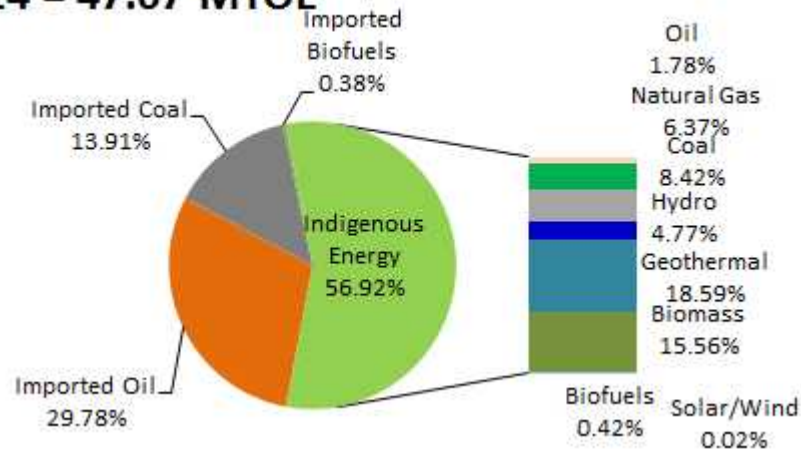
“Declaring the Compliance of Commercial, Industrial and Transport Establishments with the Philippine Minimum Energy Performance (MEP) Program as a Policy of the Government”

- *2 PubCons are necessary prior to the finalization of MEP. The conduct of a 2nd PubCon is currently being scheduled.*

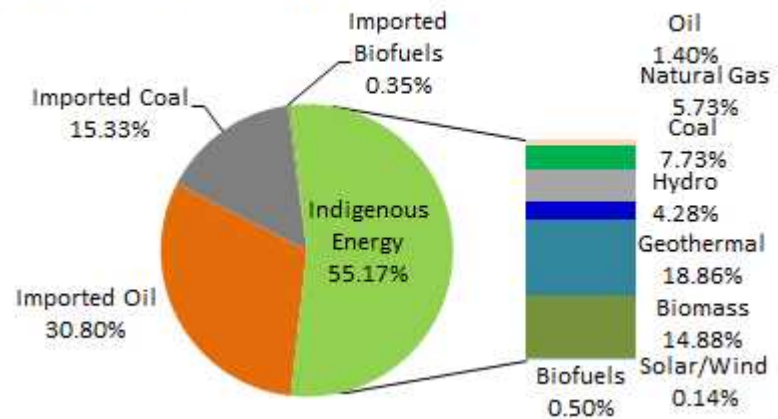
The collection of regional data is essential to estimate the country's energy improvement potentials and provide information on **sectoral energy use**.

Such data will be used to determine **Specific Energy Consumption (SEC)** and establish **Minimum Energy Performance (MEP)**.

2014 = 47.67 MTOE



2015 = 50.37 MTOE

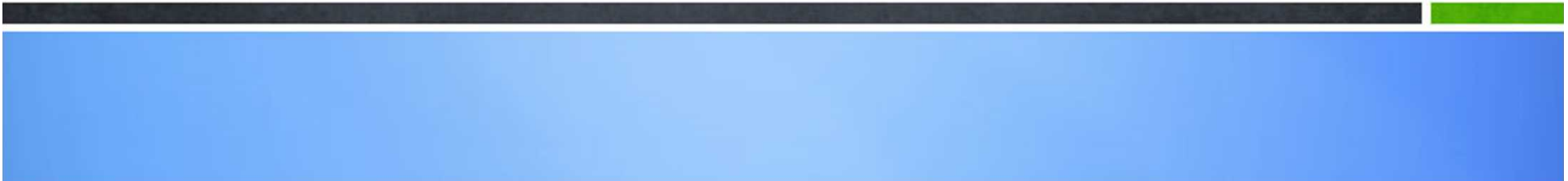


The proposed amendment to the policy shall apply to all commercial, industrial and transport establishments consuming **500,000 – 1,000,000 kWh** or **130,500 - 261,000 Liters of Oil Equivalent (LOE)** per year.

Establishments covered by the policy shall submit **Semi-Annual Energy Consumption Reports (SAECR)**

Establishments consuming more than **8 million kWh** or **2 million LOE** per year are also required to submit an **Annual Energy Conservation Report (AECR)**.

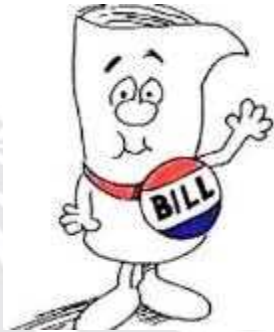
Both reports shall be submitted **online**.



Energy Rating for public office buildings based on GEMP benchmark

energy plus
0 - 50 kWh/m²a
50 - 100 kWh/m²a
100 - 150 kWh/m²a
150 - 200 kWh/m²a
200 - 250 kWh/m²a
250 - 300 kWh/m²a





THE ENERCON BILL



STATUS:

Approved by the House Committee on Energy on Aug 14, 2017.

Approved on the final reading by the Senate Plenary on Feb 5, 2018.

Approved by the House Committee on Appropriations on Feb 7 2018.

- Expecting to be approved by the House Plenary and Bi-Cameral Conference on December 2018.

END OF PRESENTATION