

# Integration & Mainstreaming of Energy Efficiency at the Local Government Units (LGUs)

## Clean Energy Forum

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Department of Energy (Philippines)





## OUTLINE

- I. About the Philippines
- II. Energy Demand Consumption (National)
- III. 2017-2040 Energy Efficiency Roadmap
- IV. National Policies on Energy Efficiency
- V. National Policy Interventions Implemented
- VI. Strategies to Integrate and Mainstream Energy Efficiency at the LGUs Level
- VII. Proposed Energy Efficiency Policies and Program for the LGUs

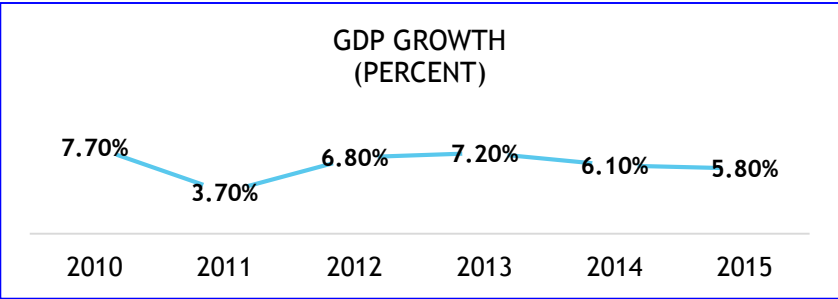


# I. About the Philippines

Political Sub-division	
Local Government Units (LGUs)	Philippines:
• Provincial Government	81
• City Government	144
• Municipal Government	1,490
• <b>Barangay</b> (small government units)	<b>42,036</b>
Population	102 Million
Regions	17



## Economy (2010-2015 Ave. 6.21%)





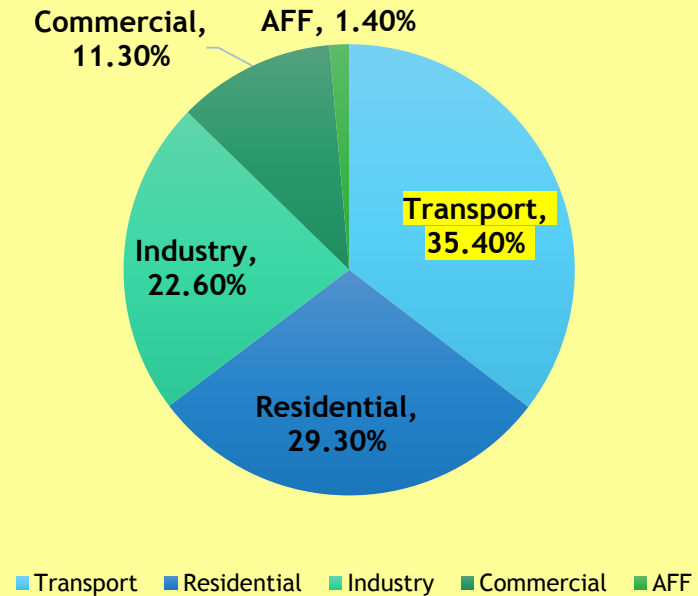
## II. Energy Demand Consumption (National)

### 2016 Final Energy Consumption

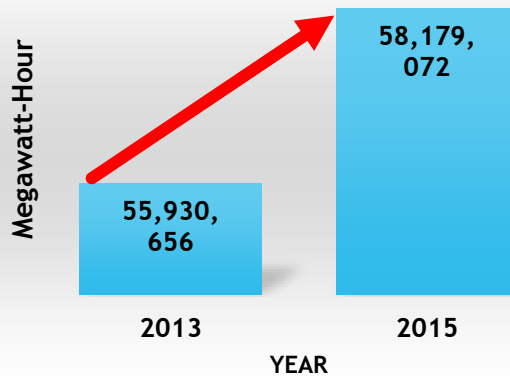
Sector	MTOE
<b>TRANSPORT</b>	<b>10.6</b>
RESIDENTIAL	8.7
INDUSTRY	6.8
COMMERCIAL	3.4
AFF	0.4
<b>Total</b>	<b>29.8</b>

\*MTOE- Million Metric Ton of Oil Equivalent  
Ref. DOE -PEP 2015 Update

### 2015 Final Energy Consumption (% Share)



### Philippines: Total Electricity Sales

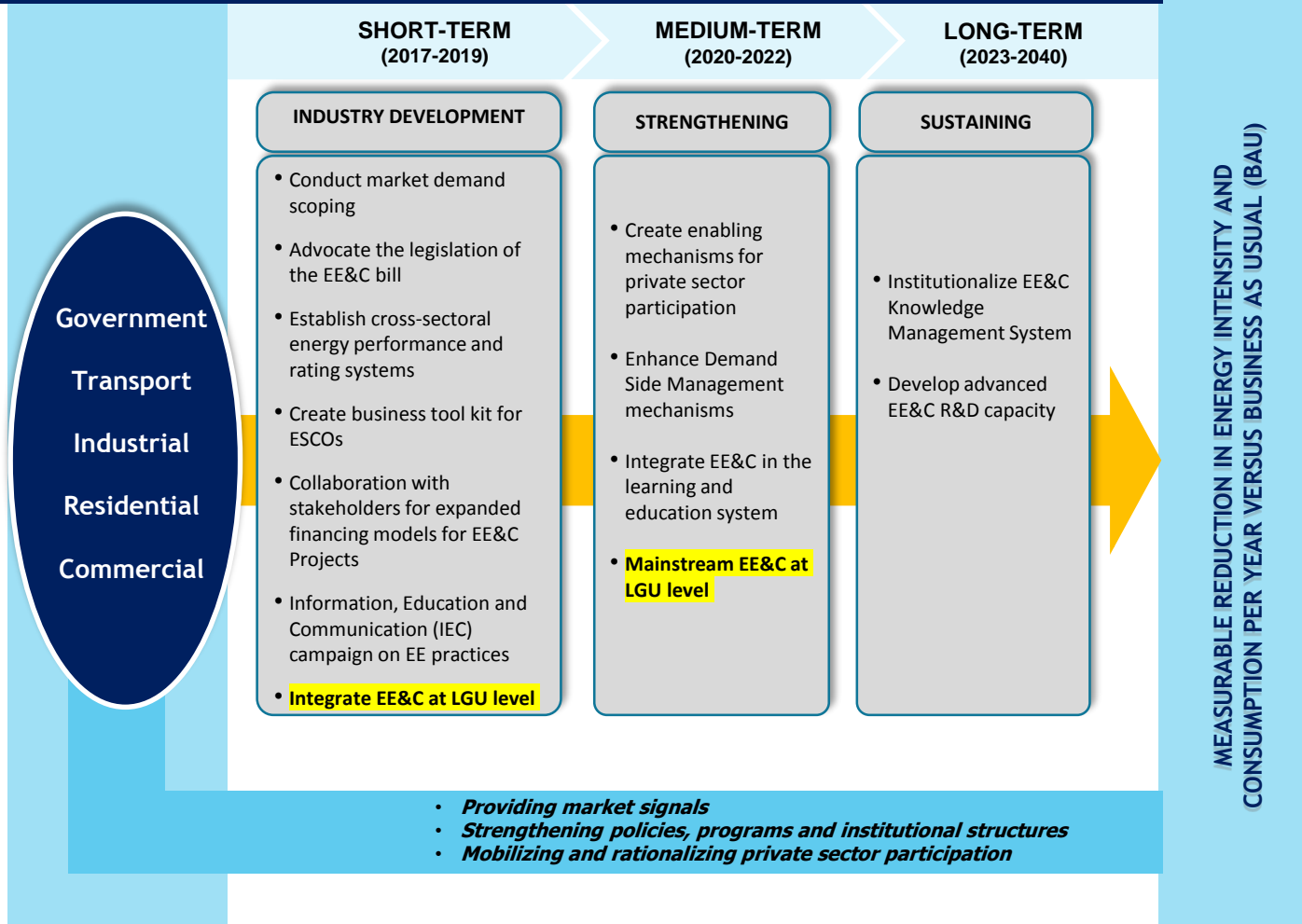


### Road Transport Vehicles

Road Transport Vehicles	Philippines (No. of Units)
Cars/UV/SUV	2,722,211
Public Transport	264,727
Motorcycle / Motorized Tricycle	4,250,667
Others (Trucks, Trailers...)	398,590

# III. 2017-2040 ENERGY EFFICIENCY & CONSERVATION ROADMAP

**OVERALL OBJECTIVE BY 2040**



## IV. NATIONAL POLICIES ON ENERGY EFFICIENCY



**RA Act 7638** Sec. 2 .Declaration of Policy. - (a) to ensure a continuous, adequate, and economic supply of energy with the end in view of ultimately achieving self-reliance in the country's energy requirements through the integrated and intensive exploration, production, management, and development of the country's indigenous energy resources, and through the **judicious conservation, renewal and efficient utilization of energy** to keep pace with the country's growth and economic development and taking into consideration the active participation of the private sector in the various areas of energy resource development;

**Policy:** National Energy Efficiency & Conservation Program (NEECP)  
**Goal:** 40% Reduction on Energy Intensity by 2035

- Limited Incentives: **BOI-Investment Priority Plan (IPP)**
- Penalty for Non-Compliance of the Directives: **None**
- **Absence** of Legislated Law on Energy Efficiency & Conservation



**Industrial Sector**

- Philippine Industrial Energy Efficiency Project (PIEEP)
- Energy Audit
- Awareness Campaign (IEC)
- Energy Consumption Monitoring
- ESCO Promotion Program\*



**Transport Sector**

- Standard & Labelling Program (Passenger Cars and Light Duty Vehicles)
- Awareness Campaign (IEC for Drivers)
- Energy Consumption Monitoring



**Building Sector**

- Energy Audit
- Awareness Campaign (IEC)
- ESCO Promotion Program\*
- Energy Consumption Monitoring
- Government Energy Management program



**Residential Sector**

- Standard & Labelling program for Household Appliances
- Awareness Campaign (IEC)
- Energy Consumption Monitoring

\* - ESCO cut across Industrial & Building Sector



Policy: National Energy Efficiency & Conservation Program (NEECP)  
Goal: 40% Reduction on Energy Intensity by 2035

## V. National Policy Interventions Implemented

### Commercial, Industrial, Transport Sectors:

- [Department Circular 93-03-05](#) - Energy Consumption Monitoring for Energy Intensive Sectors

### Government Buildings:

- [Administrative Circular 2004-110, 110-A, 126](#) – Government Energy Management Program (GEMP)

### Buildings & Industrial Sectors:

- [Department Circular 2008-09-0004](#) - ESCO Accreditation Program

### All Sectors:

- [Department Circular 2014-08-0014](#) – Enjoining all Electricity User-Consuming Sectors to Implement Demand-side Management Program and Other Energy Conservation Measures

### Residential & Transport Sector:

- [Department Circular 2016-004-0005](#) - Philippine Energy Standard and labelling Program [Home Appliances and Motorized Vehicles]



## VI. STRATEGIES to Integrate and Mainstream Energy Efficiency at the LGUs Level (ref. EE Road Map 2017-2022)

**S-1:** Enactment of SBN 30 and HBN 182 into Law by the House of Congress

**S-2:** Conduct of Seminar-Workshop on the Integration and Mainstreaming of EE at the LGU Level (DOE)

**S-3:** Promote Green Building Code of the Philippines (DPWH)

**S-4:** Promote Concept of Low Carbon Model Town / Energy Smart City





## Strategy Interventions For Legislation (SBN 30 & HBN 182)

**S-1:** For Legislation: Senate Bill No. 30. AND House Bill No. 182 - **An Act institutionalizing Energy Efficiency and Conservation, Enhancing the Efficient Use of Energy, Granting Incentives to Energy Efficiency and Conservation Projects, and For Other Purposes**

### CHAPTER3

## ROLE OF LOCAL GOVERNMENT UNITS (LGUs)

**SEC.10 Role of Local Government Units and Leagues of Local Government Units and Elective Officials.** – In support of the government’s energy efficiency and conservation program, local government units **shall integrate a local energy efficiency program**, to be headed by Municipal/City Planning and Development Officer, **into their local development plans** based on the guidelines to be provided in the implementing rules and regulations (IRR) of this Act. The Energy Efficiency and Conservation (EE&C) plan shall include the reporting of an Annual Energy Consumption by SMEs as part of the requirements for the business permit renewal.

The LGU shall monitor and report on the status of energy efficiency programs and projects to the DILG and the DOE.

## Other Strategy Interventions to Accelerate Integration and Mainstreaming of EE at the LGUs Level

### **S-2: CONDUCT OF INFORMATION, EDUCATION AND COMMUNICATION CAMPAIGN PROGRAM (IEC)**

- **Integration and Mainstreaming of Energy Efficiency at the LGU Level**

**DOE to help develop the energy efficiency program for integration into their Local Development Plan**

**For 2017 -2018:** Four Events 3-day Regional Seminar-Workshops

**Target Participants:** Local Executives, Council Members, Administrators, Office of the Building Officials, Planning Office, CENTRO, PENTRO, other stakeholders, etc.



### **S-3: \* PROMOTE GREEN BUILDING CODE OF THE PHILIPPINES**

- Improve efficiency of building performance through set of standards
- Counter harmful gases responsible for effects of climate change
- Efficient use of resources, site, design, construction, maintenance

#### **Energy Performance Standards:**

- 1) Energy Efficiency**
- 2) Water Efficiency
- 3) Material Sustainability
- 4) Solid Waste Management
- 5) Site Sustainability
- 6) Indoor Environmental Quality

\* - Green Building Code was developed by the Department of Public Works and Highways (DPWH); a referral code to the National Building Code of the Philippines)



## **S-4: PROMOTE LOW CARBON MODEL TOWN / SMART CITY**

### **Mandaue City Low Carbon Model Town:**

- Selected as the next Low Carbon Model Town of the Asia-Pacific Economic Cooperation (APEC) - 12th APEC Energy Ministers' Meeting in Cebu last 13 October 2015.
- Received technical assistance through a feasibility study, which examined the city's initiatives on energy-efficient buildings, transport, and power systems.

## **Local Government Units with Low Carbon Governance**

- Mandaluyong City
- Quezon City
- Makati City
- Pasig City
- Mandaue City



## VIII. Proposed Energy Efficiency Policies and Programs for the LGUs

### Menu of Proposed Policy Ordinance / Program

- |  |  |
|--|--|
| <input type="checkbox"/> Internal Policy: Adoption of Energy Management System / Program | <ul style="list-style-type: none"><li>• Covers all Public Buildings owned by the LGU including Parks, recreational facilities, Roadways and Streets i.e., Adoption of Energy Efficient Lighting System</li></ul> |
| <input type="checkbox"/> Green Building Ordinance  | <ul style="list-style-type: none"><li>• Compliance for New and Retrofit Building</li></ul>   |
| <input type="checkbox"/> Smart City / Low Carbon Model Town                              | <ul style="list-style-type: none"><li>• Accelerate Low Carbon Governance implementation</li></ul>  |
| <input type="checkbox"/> Building Energy Efficiency Standards                            | <ul style="list-style-type: none"><li>• Sets of Standards: i.e., air leakage, thermal resistance/insulation, ventilation, etc.</li></ul>   |
| <input type="checkbox"/> Financial Incentives for Renewable and Energy Efficiency        | <ul style="list-style-type: none"><li>• Promote implementation of RE and EE project upgrades</li></ul>   |
| <input type="checkbox"/> Green Energy Program  | <ul style="list-style-type: none"><li>• Fiscal or Non-Fiscal Incentives for the installation of RE Energy System</li></ul>   |
| <input type="checkbox"/> Small Business Energy Efficiency program                        | <ul style="list-style-type: none"><li>• Get information on programs that help small businesses identify and install energy conservation measures in their facilities</li></ul>                                   |
| <input type="checkbox"/> Commercial and Industrial Energy Efficiency Program             | <ul style="list-style-type: none"><li>• Offers Technical and Financial assistance program to help businesses to be more competitive through Energy Efficiency Improvements</li></ul>                             |

# Thank You



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