

# ENERGY EFFICIENCY AND CONSERVATION ACTION

DIR. PATRICK T. AQUINO, CESO III ENERGY UTILIZATION MANAGEMENT BUREAU

## **Electric Vehicle Industry Development Act**



The EVIDA aims to ensure the country's energy security and independence by reducing reliance on imported fuel for the transport sector, among others.

**<u>Republic Act No. 11697</u>** An Act Providing for the Development of the Electric Vehicle Industry



Government Agencies



Demand Generation



Incentives

## Comprehensive Roadmap for the Electric Vehicle Industry (CREVI)

Is the national development plan for the Electric Vehicle Industry with an annual work plan to accelerate the development, commercialization, and utilization of Electric Vehicles in the Philippines.



## **Renewable Energy in the PH**

## RENEWABLE ENERGY

RE refers to energy resources that do not have an upper limit on the total quantity to be used.

## Republic Act No. 9513

An Act Promoting the Development, Utilization, and Commercialization of Renewable Energy Resources and for Other Purposes



Green Energy Option Program



Renewable Energy Service Net Metering Contract

## RenewableEnergyManagementBureau (REMB)

Mandated to formulate and implement policies, plans, and programs related to the accelerated development, transformation, utilization and commercialization of renewable energy resources including emerging energy technologies.

## RE Projects Awarded (as of 30 June 2022)

Potential Capacity (MW)
203.72
883.2
12,194.91
24
19,816.25
28,479.18
61,601.26





## Republic Act No. 11285 Energy Efficiency and Conservation (EE&C) Act

Republic Act No. 11285

Energy Efficiency and Conservation Act The EE&C Act institutionalizes energy efficiency and conservation, enhance the efficient use of energy, and grant incentives to energy efficiency and conservation projects.

## **EEC ACT**

## IMPLEMENTATION STATUS OF THE EE&C ACT IN THE PHILIPPINES



As of September 2022, the DOE has issued the following issuances

**28** POLICY ISSUANCES

- Memorandum Circular (MC)
- **3** Department Orders (DO)
- **13** Department Circulars (DC)
  - **6** IAEECC Resolutions
  - **5** Implementing Guidelines (IG)

Title of Issuance	Date Signed and Date of Effectivity
DC2019-11-0014: Implementing Rules and Regulations of Republic Act No. 11285 (Energy Efficiency and Conservation Act)	Date Signed: November 22, 2019 Date of Effectivity: December 21, 2019
DO2020-01-0001: Organizing the Inter-Agency Energy Efficiency and Conservation Committee (IAEECC)	Date Signed and Effectivity: January 09, 2020
DO2020-01-0002: Operationalization of the Strengthening of the Energy Utilization Management Bureau (EUMB), Support Services and Field Offices in Accordance with Republic Act No. 11285 or the Energy Efficiency and Conservation Act (EEC Act)	Date Signed and Effectivity: January 28, 2020
MC2020-05-001: Directing All Designated Establishments Under Commercial, Industrial and Transport Sectors to Submit Energy Consumption Reports	Date Signed: May 13, 2020 Date of Effectivity:11 June 2020
DC2020-06-0015: Prescribing the Guidelines of the Philippine Energy Labeling Program (PELP) for Compliance of Importers, Manufacturers, Distributors and Dealers of Electrical Appliances and other Energy-Consuming Products (ECP)	Date Signed: June 15, 2020 Date of Effectivity: July 01, 2020
DC2020-06-0016: Prescribing the Minimum Energy Performance for Products (MEPP) Covered by the Philippine Energy Labeling Program (PELP) for Compliance of Importers, Manufacturers, Distributors, Dealers and Retailers of Energy-Consuming Products (ECPs)	Date Signed: June 15, 2020 Date of Effectivity: July 01, 2020
DC2020-09-0018: Guidelines in the Administration, Classification of Energy Service Company (ESCO)	Date Signed: September 9, 2020 Date of Effectivity: 09 October 2020
DC2020-12-0026: Adoption of the Guidelines on Energy Conserving Design of Buildings	Date Signed: December 22, 2020 Date of Effectivity: 06 Match 2021
DC2021-01-0001: Guidelines for the Qualifications, Assessments, Registration and Certification of Energy Conservation Officers (CECO), Energy Managers (CEM) and Energy Auditors (EA)	Date Signed: January 11, 2021 Date of Effectivity: 06 March 2021
DC2021-05-0011: Guidelines in the Endorsement of Energy Efficiency Projects to the Board of Investment for Fiscal Incentives	Date Signed: May 11, 2021 Date of Effectivity: June 17, 2021
DC2022-03-0004: Guidelines for the Endorsement of Energy Efficiency Strategic Investments to the Board of Investments for Fiscal Incentives	Date Signed: March 03, 2022 Date of Effectivity: April 06, 2022
DC2022-03-0006: Adoption of Training Regulations Certification Process for Energy Auditors (EAs)	Date Signed: March 17, 2022 Date of Effectivity: April 06, 2022
DC2022-03-0007: Adoption of Training Regulations for the Certification of Energy Conservation Officers (ECOs)	Date Signed: March 17, 2022 Date of Effectivity: April 28, 2022
DC2022-03-0008: Adoption of Training Regulations and Prescribing Certification Process for Training Institutions and Energy Managers (EMs)	Date Signed: March 17, 2022 Date of Effectivity: April 28, 2022



## **CERTIFICATION OF** EM, EA, AND ECO

DC2022-03-0008: Adoption of Training Regulations and Prescribing Certification Process for Training Institutions and Energy Managers (EMs)



DC2022-03-0006: Adoption of Training Regulations Certification Process for Energy Auditors (EAs)



**Certified Energy Auditor (CEA)** 

DC2022-03-0007: Adoption of Training Regulations for the Certification of Energy Conservation Officers (ECOs)



List of DOE EE Practitioners



Certified Energy Conservation Officer

**Recognized Training Institutions (RTI)** refers to recognized entities that complied with the requirements identified by the DOE and are only eligible to conduct prescribed training for CEM and CEA.

RTI for Energy Manager	2
RTI for Energy Auditor	4



## Energy Service Company (ESCO)

## Department Circular No. DC2020-09-0018

Guidelines, Rules, and Procedures in the Administration, Classification, and Certification of Energy Service Companies

ESCOs are partners in compliance with the EEC Act, as they offer multi-technology services and goods towards developing and designing EE projects, delivering and guaranteeing energy savings, and ensuring cost-effective and optimal performance.



ESCO registered to DOE as of September 2022

- Energy Integrated Systems and Support Services Inc
- 2 Tri-Sky Link Sales and Services, Inc.
- 3 Santos Knight Frank, Inc.
- 4 Engie Services (Philippines)
- 5 Design Science Inc.
- 6 Meralco Energy, Inc.
- Tekno Centrix Corporation
- 8 Wisenergy, Inc.
- 9 Concepcion Carrier Air Conditioning Company Alstra Division
- 10 Filairco, Inc/Trane Philippines
- Beyond Energy Solutions & Techonology, Inc.
- 12 Total Renewable Energy Efficiency Solutions Corp.
- Eascorp Powerplant Services, Inc.
- 14 EconoServ Solutions International, Inc.
- 15 Upgrade Energy Philippines, Inc.
- 16 WESTCO Electrical & Equipment Corp.
- 17 OSP-ESCO International, Inc.
- 18 Alpha Centauri Electrical Services
- 19 Exquis Electrical Services & Supplies Company
- 20 First Gen Energy Solutions
- EP Solutions, Inc.
- 22 Enercon Systems International Philippines Corp.
- 23 Buskowitz Finance, Inc.
- 24 Greenergy Development Corporation
- 25 Renesons Energy Polillo, Inc.
- 26 Mase Power Corporation
- 27 Stratcon Power Services Philippines, Inc.
- 28 Signify Philippines, Inc.
- 29 PNOC-Renewables Corporation
- 30 Navitas Energy Services, Inc.
- 31 TS-i Energy Solutions Corp.
- 32 Accelence Consulting, Inc.
- 33 Thermal Solutions, Inc.
- 34 Pi Energy Inc.
- 35 CEMKS UK PHILS. LTD. CORP.
- 36 Vega Energy Services
- 37 S.Y. Industrial Corporation
- 38 FVMapile Incorporated
- 39 Adventenergy Inc.
- 40 Sen Tek Energy Solutions Inc.



# Government Energy Management Program (GEMP)

Government-wide program to reduce the government's monthly consumption of electricity and petroleum products through efficiency and conservation of electricity and fuel use.

## Inter-Agency Energy Efficiency and Conservation Committee (IAEECC)

Created to evaluate and approve government energy projects and to provide strategic direction in the implementation of Government Energy management Program or GEMP

- IAEECC Resolution No. 1, s. 2020 Directing all Government Agencies, including the Local Government Units (LGUs) and Foreign Service Posts, to Comply with the Government Energy Management Program (GEMP), Ordering the Department of Energy to Conduct Energy Audits and Spot Checks, and Submit Proposed Improvements to the GEMP.
- IAEECC Resolution No. 2, s. 2021 Directing All Government Entities, including the LGUs and Foreign Service Posts, to Use Energy Efficient Lighting Emitting Diode (LED) Lamps in Government Buildings and Facilities as a Requirement for Compliance to the GEMP.



- IAEECC Resolution No. 3, s. 2021 Directing All Government Entities, including LGUs and Foreign Service Posts, to Use Inverter Type Air-Conditioning Units or Similar Equivalent Technologies in Government Buildings and Facilities as a Requirement for Compliance to the GEMP.
- IAEECC Resolution No. 4, s. 2021 Enjoining the Council of Good Local Governance to Consider, Include and Adopt the Energy Efficiency and Conservation (EEC) as one of the Areas in the Criteria per Section 7 of Republic Act No. 11292 – "The Seal of Good Local Governance Act of 2019"
- IAEECC Resolution No. 5, s. 2022 Directing All Government Entities, including the LGUs and Foreign Service Posts to Observe the Approved GEMP Guidelines.
- IAEECC Resolution No. 6 s. 2022 Recommending to the Governance Commission for Government-Owned or Controlled Corporations (GOCC) to Consider, Include, and Adopt Energy Efficiency and Conservation (EEC) as One of the Criteria in the Performance Evaluation System for GOCCs in the Grant of Performance-Based Incentives





## Department Circular No. DC2020-06-0016

Prescribing the Minimum Energy Performance for Products (MEPP) covered by the Philippine Energy Labeling Program (PELP) for Compliance of Importers, Manufacturers, Distributors, Dealers and Retailers of Energy-Consuming Products

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## Minimum Energy Performance (MEP) for Sectors



**ESTABLISHMENT** 

- foundation for the implementation of energy efficiency projects
- a vital factor in the periodic adjustment of the Energy Threshold
- target annual energy reduction



COLD CHAIN



Certification protocol for the

provide a strategic guideline

to govern one of the energy-

intensive and important

sectors in the country.





establish an energy efficiency indicator in the commercial sectors

BEI



establish an energy efficiency indicator in the industrial sectors



# PHILIPPINE ENERGY LABELING PROGRAM

#### Department Circular No. DC2020-06-0015

Prescribing the Guidelines of the Philippine Energy Labeling Program (PELP) for Compliance of Importers, Manufacturers, Distributors and Dealers of Electrical Appliances and Other Energy-Consuming Products



- The Philippine Energy Labeling Program aims to initiate market transformation and promote energy efficiency and through the regulation of energy consuming products.
- Initial coverage includes air conditioners, refrigerating appliances, television sets and lighting products.

**APPROVED PRODUCT REGISTRATION** 

"More stars and higher rating means more savings" Issuance Year of Energy Rating: Monthly Energy Consumption\*: Brand Name: Product Model: Cooling Capacity (kW):

**ENERGY LABEL** 

**Air Conditioner** 

**Energy Efficiency Rating:** 

Refrigerant: Rxxxx (GWP xxx) Installation Type: Power Input (W): For more information: For more information: Energy Label issued under Section 15 Republic Act No. 112 Non-compliance, removal, defacing, under Section 30 and will be subject under Section 30 and will be subject under Section 30 and will be subject



## **PELP** REGISTRATION

ISSUED ENERGY - LABEL 1651

PENDING FOR APPLICATION OF

**ENERGY LABEL** 

34

#### Department Circular No. DC2022-03-0005

Guidelines for the Recognition of Testing Laboratories for the Examination, Testing and Verification of the Energy Efficiency of Energy-Consuming Products (ECPs) and the Fuel Efficiency of Transport Vehicles, including the Issuance of Certificate of Endorsement to the Board of Investments (BOI) for Fiscal Incentives

Recognized Testing Laboratories (RTLs) provide testing services on energy performance and fuel efficiency

ISSUED CERTIFICATE OF

EXEMPTION 231

- conduct of verification testing of post-market samples obtained by DOE during monitoring activities.
- conduct of verification testing necessary for the resolution of challenge tests lodge towards a PELP-covered product.
- conduct energy performance testing for energy labeling registration purposes.



# **Fiscal Incentives**

This Department Circulars shall establish the guidelines, rules and procedures in the endorsement of energy efficiency projects as well as the procedures and criteria for the evaluation, approval, and endorsement of the EE Strategic Investments covering New and Expansion of EE Projects to the BOI for the availment of Fiscal Incentives.

Department Circular No. DC2021-05-0011 Guidelines on the Endorsement of Energy Efficiency Projects to the Board of Investments (BOI) Fiscal Incentives



Projects that involve new installation, upgrading or retrofitting of a specific equipment of devices in the system



Projects that involve new installation, retrofitting, or upgrading of system or a combination of a systems



The EE Project must be able to meet the minimum 15% project boundary and a minimum Project Investment Cost of ₱ 10,000,000.00.

## Department Circular No. DC2022-03-0004

Guidelines for the Endorsement of Energy Efficiency Strategic Investments to the Board of Investments for Fiscal Incentives



Project

Application

**Efficiency Projects** 

20 Days Processing Time

EΕ on-going project designed to further increase energy savings.

**DOE Endorsement** 

to BOI



# **Non-Fiscal Incentives**

## **Energy Efficiency Excellence (EEE) Awards**

## Department Circular No. DC2021-09-0014

Guidelines on the Energy Efficiency Excellence Awards

#### LARGE BUILDING CATEGORY

- Bonifacio High Street East
- U.P. AyalaLand TechnoHub
- Teleperformance Ayala

#### GREEN BUILDING (SMALL AND MEDIUM) CATEGORY

- The Mind Museum

#### SPECIAL AWARD FOR THE INNOVATIVE USE OF TECHNOLOGY

 Republic Cement and Building Materials, Inc. Teresa Plant – Horomill CRH Aboitiz Company

#### EEE PROJECTS IMPLEMENTED AND OTHER BEST PRACTICES

- San Miguel Yamamura Packaging Corporation San Fernando Beverage Packaging Plant

## **OUTSTANDING INDIVIDUAL/GROUP**

- Albert B. Revilla

## **EEE AWARD FOR GOVERNMENT**

## LOCAL GOVERNMENT UNIT

- Provincial Government of Albay

## NATIONAL GOVERNMENT AGENCY

- DTI Philippines Cordillera Administrative Region
- National Economic and Development Authority – Region IVA
- National Econimic and Development Authority – Region II
- Department of Budget and Management – Region V

#### GOVERNMENT-OWNED AND/OR CONTROLLED CORPORATIONS

213

RECEIVED

**ENTRIES** 

- National Power Corporation Head Office
- National Power Corporation SPUG Luzon Operations Division
- National Transmission Corporation

#### Energy Management for Industries and Buildings 180

## A total of 15 recipients for the 2021 EEE Awards

Outstanding

Individuals/Groups

18

Special

Awards 15







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