UPDATES ON THE IMPLEMENTATION OF THE ENERGY EFFICIENCY AND CONSERVATION (EEC) ACT

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Energy Utilization Management Bureau
Department of Energy

REPUBLIC ACT 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.

ISSUED POLICIES BY THE DOE

(as of June 2021)

As of June 2021, the DOE have issued the following issuances

1 MEMORANDUM CIRCULAR (MC)

2 DEPARTMENT ORDERS (DO)

8 DEPARTMENT CIRCULARS (DC)

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
DC2020-10-0023: Prescribing Policy Framework for the Development of the Fuel Economy Rating, Fuel Economy Performance, and Related Energy Efficiency and Conservation Policies for the Transport Sector and other Support Infrastructures	Date Signed: October 22, 2020 Date of Effectivity: December 12, 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*

TARGET POLICIES BY THE DOE

Particulars	Date Start/Completion
Rule III Section 4.a - **Create, update the development of the National Energy Efficiency and Conservation Plan (NEECP)**	January – July 2021
Rule III Section 4.b - **Develop monitoring system for targets under NEECP**	August – December 2021
Rule III Section 4. c Rule V. Section 27 - **Develop and maintain National Energy Efficiency and Conservation Database (NEECD)**	January-December 2021
Rule III Section 4.(M) Rule XIX Section 85 - **Develop and undertake a national awareness and advocacy campaign on energy efficiency and conservation**	January – December 2021
Rule III Section 4.(O) - **Develop guidelines and procedures on the imposition and collection fees for accreditation and certification services**	August – December 2021
Rule III Section 5. Rule VI Section 34 - **Develop guidelines on Visitorial Powers and On-Site Inspections for Designated Establishments and Energy End Users**	October – December 2021
Rule V Section 29 - **Establishment of National Energy Efficiency and Conservation Office**	July – December 2021
Rule VII Section 40 - **Develop guidelines on the criteria for identifying government energy efficiency projects and standard for approval**	July – December 2021
Rule VIII Section 43. Rule XI Section 57 - **IAEECC to issue coverage of the GEMP and the use of savings, on buildings**	July December 2021
Rule IX Section 47 - **IAEECC to issue modalities on financial arrangements for government energy efficiency and conservation projects**	July – December 2021
Rule XI Section 55 - **Development of MEP for Sectors**	August – December 2021
Rule XII Section 60 - **Develop and prescribe fuel economy performance labelling requirements for transport**	July – December 2021
Rule XII Section 61. b - **Develop fuel efficiency testing guidelines**	October-December 2021
Rule XII Section 61. c - **Develop guidelines for monitoring compliance to energy label and fuel economy performance**	January – June 2021
Rule XIII Section 62. Rule XIII Section 63. Rule XIII Section 64. - **Guidelines on Designated Establishments which computing consumption, procedure for compliance**	April – July 2021
Rule XIV Section 70 – **Develop Demand Side Management Program**	March – May 2021
Rule XV Section 71. - **Develop certification for endorsement to Board of Investments for entitlement to fiscal incentives**	January – May 2021
Rule XV Section 73. Rule XV Section 74. - **Develop awards, recognition and technical assistance programs as non-fiscal incentive**	January-July 2021
Rule XV Section 75. - **Develop endorsement guidelines for government financial institutions**	July – December 2021
Rule XVIII Section 83. - **Develop schedule of fines and penalties for violations under EEC Act and EEC IRR**	July – December 2021
Rule X Section 51 - **Establish third-party institution recognition for energy efficiency and conservation seminars for certified energy managers (CEM)**	January – March 2022
Rule X Section 49.Rule X Section 50. Section 54 - **Establish system for the assessment and certification of energy conservation officers, energy managers and energy auditors – Specifics to Training** Regulations, Modules/Subject Curriculum or Syllabus	CY 2021 – CY 2022
Rule III Section 4. K Rule VI Section 33 - **Develop appropriate mechanism for direct benefit of the Energy End User which may include among others electrical safety standards and system reliability**	January – April 2022
Rule III Section 4. E Rule XI Section 56 - **Develop, review and Impose Minimum Energy Performance (MEP)**	January-April 2022

POLICIES BY EUMB ENDORSED FOR ISSUANCE

Proposed Implementing Guidelines for the Philippine Energy Labeling Program

5 **IMPLEMENTING GUIDELINES (IGs)**

- *Air conditioners*
- *Refrigerating Appliances*
- *Television Sets*
- *Lighting Products*
- *Registration, EMV, Compliance Mechanism*

- The 1st and 2nd Virtual Public Consultations on the draft Implementing Guidelines of the Philippine Energy Labeling Program (PELP IG) was conducted on 03 October 2020 and 26 February 2021, respectively.

- The 3rd Virtual Pubcon on the draft PELP IG was conducted on 07 April 2021.

The proposed guidelines will institutionalize the use of energy labels among energy consuming labels, streamline the process for energy product registration and issuance of the energy labels and strengthen the monitoring, enforcement and verification measures to ensure the effective implementation of the program.

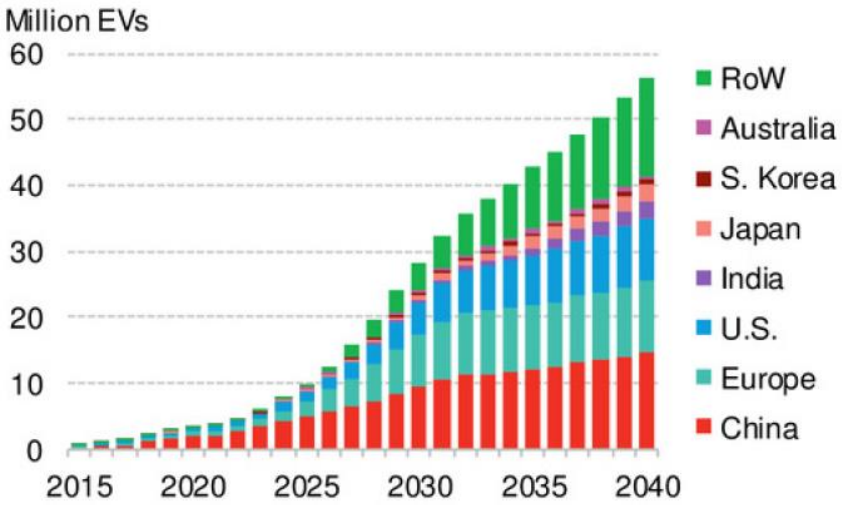
POLICIES BY EUMB ENDORSED FOR ISSUANCE

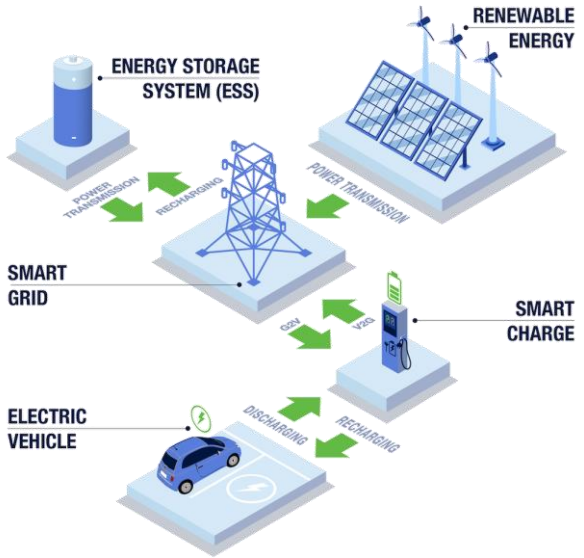
Development, Establishment, and Operation of Electric Vehicle Charging Stations (EVCS) in the Philippines

The proposed Department Circular shall provide a policy framework for the Development, Establishment, and Operation of EVCS through consolidation and harmonization of all existing issuances to ensure safe, efficient operations and system reliability, and to accelerate investments of EVCS in the country

*By 2040, **57% of all passenger vehicles sales** and just over **30% of the global passenger vehicle fleet will be electric.***

Figure 10: Annual passenger EV sales by region





***Vehicle to grid (V2G)** - refers to plug-in electric vehicle interaction with the electric grid, including charging as well as discharging and bi-directional communication interface.*

POLICIES BY THE IAEECC (as of June 2021)

ISSUED: IAEECC Resolution No. 1 entitled Directing All Government Agencies, including the LGUs and Foreign Service Posts, to Comply with GEMP, Ordering the Department of Energy to Conduct Energy Audits and Spot Checks, and Submit Proposed Improvements to the GEMP

FORTHCOMING: IAEECC Resolution entitled Directing All Government Entities, including the Local Government Units (LGUs) and Foreign Service Posts, to Use Energy Efficient Light Emitting Diode (LED) Lamps in Government Buildings and Facilities as a Requirement for Compliance to the Government Energy Management Program (GEMP)

IAEECC Resolution entitled Adopting the Government Energy Management Program (GEMP) Guidelines


Energyability
FOR ENERGY EFFICIENCY AND SECURITY


energyability
FOR ENERGY EFFICIENCY AND SECURITY
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FOR ENERGY EFFICIENCY AND SECURITY

ENERGY SERVICE COMPANY (ESCO)

Energy Service Company (ESCO)

ESCO 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.

Services offered by ESCO:

- *Energy audit (detailed and investment grade)*
- *energy supply and management*
- *energy financing*
- *technical engineering expertise and consultancy*
- *equipment supply, installation, operation, maintenance and upgrade, and monitoring and verification of performance and savings*

DOE Department Circular DC2020-09-0018

Guidelines in the Administration, Classification and Certification of Energy Service Company (ESCO)

Section 4 of DC2020-09-0018 ***allows full foreign-owned ESCO*** *to register with the DOE given that they are duly registered with the* ***Securities and Exchange Commission or the Department of Trade and Industry*** *or licensed as a branch office by the Securities and Exchange Commission, in compliance with the applicable laws of the Philippines, including Republic Act No. 11232 or the Revised Corporation Code and Republic Act No. 7042 or the "Foreign Investment Act"*

22 *Registered ESCOs to DOE as of June 2021*

ENERGY SERVICE COMPANY (ESCO)

Registered[1] Energy Service Company (ESCO) as of June 2021

List of Energy Service Companies (ESCO)

(As of June 2021)

1. *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.*
7. *Tekno Centrix Corporation*
8. *Wisenergy, Inc.*
9. *Concepcion Carrier Air Conditioning Company*
10. *Filairco, Inc/Trane Philippines*
11. *Beyond Energy Solutions & Techonology, Inc.*
12. *Total Renewable Energy Efficiency Solutions Corp.*
13. *Edward Marcs Philippines, Inc*
14. *Azbil Philippines Corporation*
15. *Digital Marketing*
16. *Upgrade Energy Philippines, Inc.*
17. *PNOC-Renewables Corporation*
18. *Greenergy Development Corporation*
19. *Buskowitz Finance Incorporated*
20. *Enercon Systems International Philippines Corp.*
21. *EP Solutions, Inc.*
22. *Alpha Centauri Electrical Services*

[1]Under this DC2020-09-0018, an ESCO shall be required to be registered to the DOE and shall be classified either as Registered ESCO or Certified ESCO.

CERTIFICATION OF ECO, EM, AND EA

Prescribes the guidelines for the assessment, registration, and certification of energy conservation officer, energy managers, and energy auditors.

Department Circular No. DC2021-01-0001
Guidelines for the Qualifications, Assessment, Registration, and Certification of Energy Conservation Officers (CECO), Energy Managers (CEM) and Energy Auditors (EA)

Certified Energy Managers (CEM)

A graduate of a four (4) year course, preferably engineering, with at least three (3) years of continuous hands-on experience in the installation, operation, and maintenance of energy-consuming machines and equipment in facilities with energy consumption for Type 2 Designated Establishments.

Certified Energy Conservation Officer (CECO)

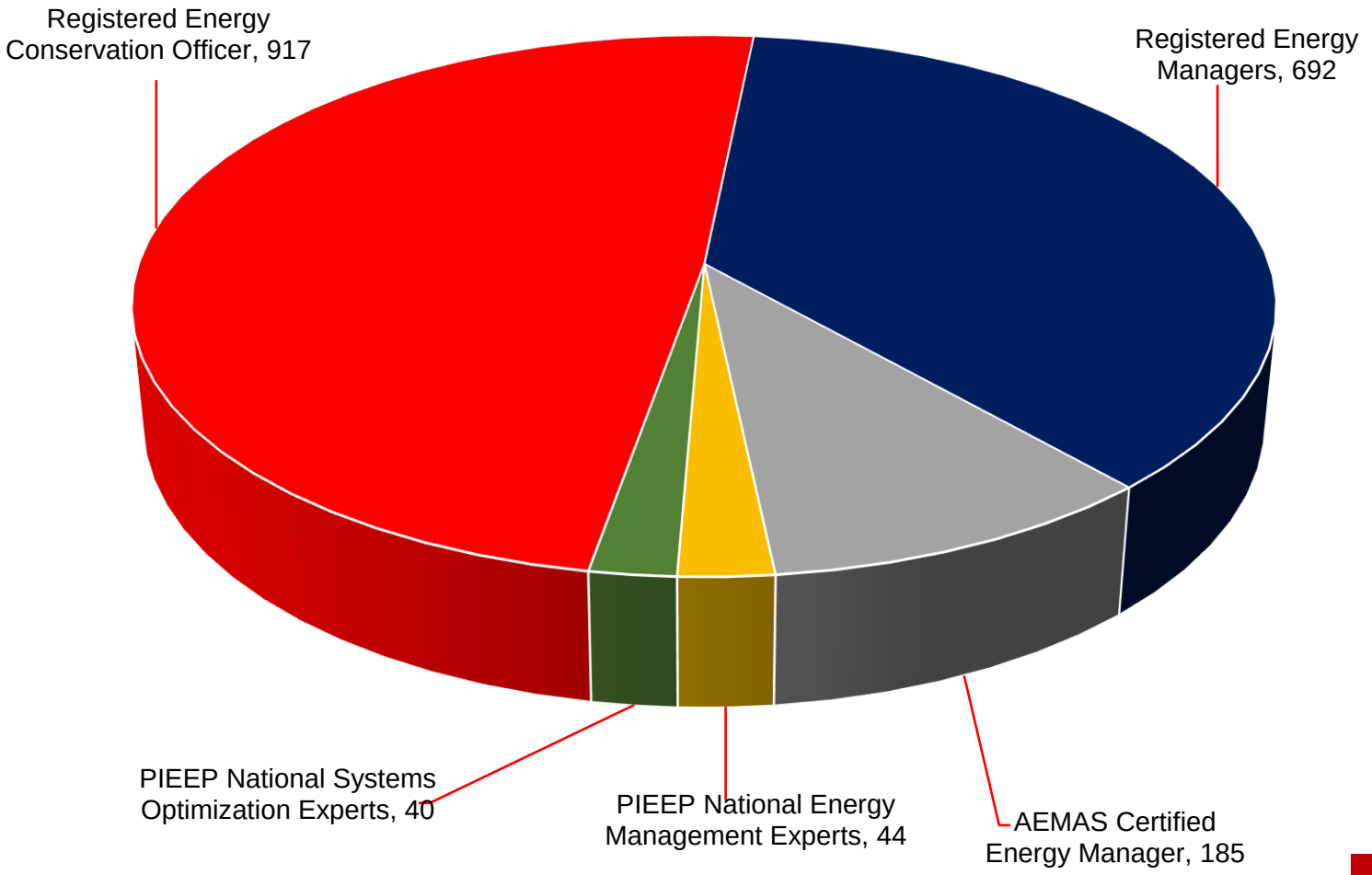
Must have at least two (2) years of continuous hands-on experience in the installation, operation, and maintenance of energy-consuming machines and equipment in facilities with energy consumption for Type 1 Designated Establishments.

Energy Auditor (EA)

An individual or entity with proven credibility and competence to conduct an energy audit.

ENERGY EFFICIENCY PRACTITIONERS

ENERGY EFFICIENCY PRACTITIONERS



2020 DATA ON EE PRACTITIONERS

Registered Energy Conservation Officers	*974*
Registered Energy Managers	*739*
PIEEP National Systems Optimization Experts	*40*
PIEEP National Energy Management Experts	*44*
AEMAS Certified Energy Manager	*185*

As of June 2021, there are
1,982 Energy Efficiency Practitioners in the Philippines

[1]Data does not include Energy Efficiency and Conservation Officer (EECO) for the Government Sector

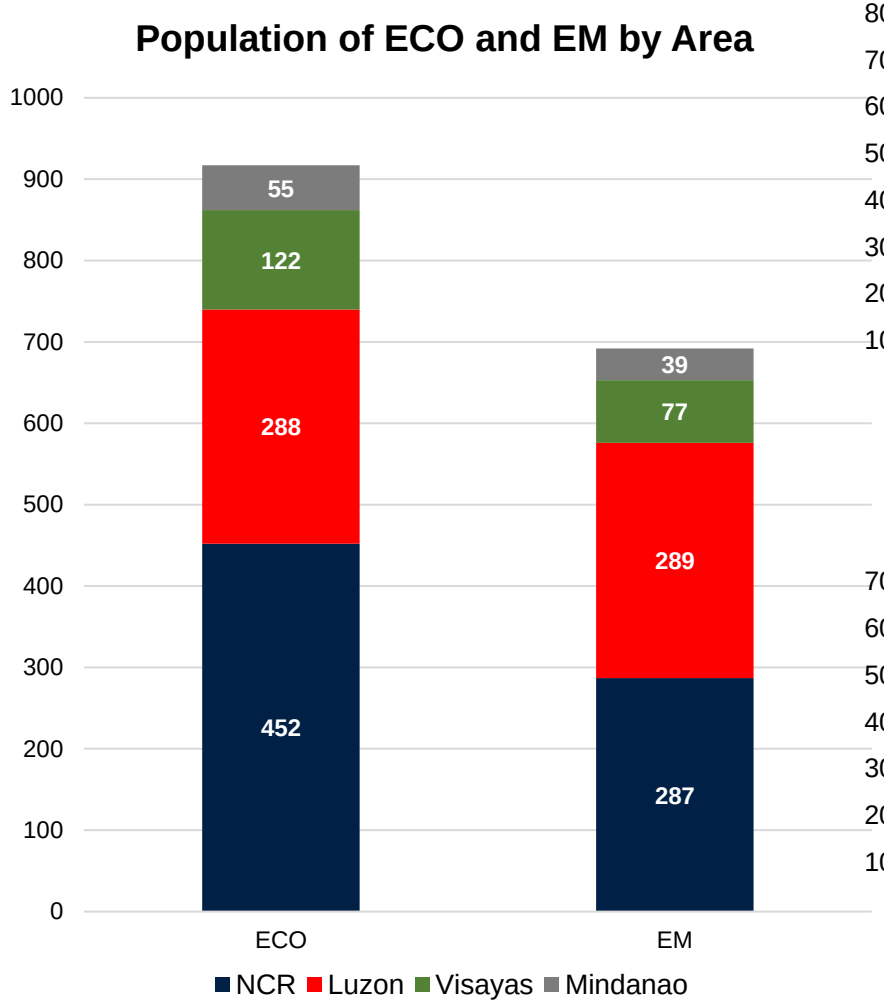
DEMOGRAPHICS OF ECOs AND EMs

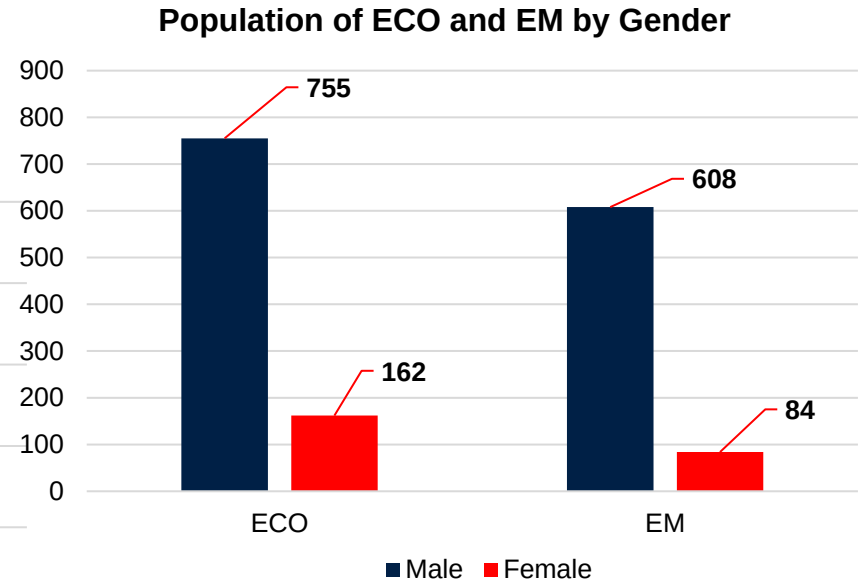
(As of June 2021)

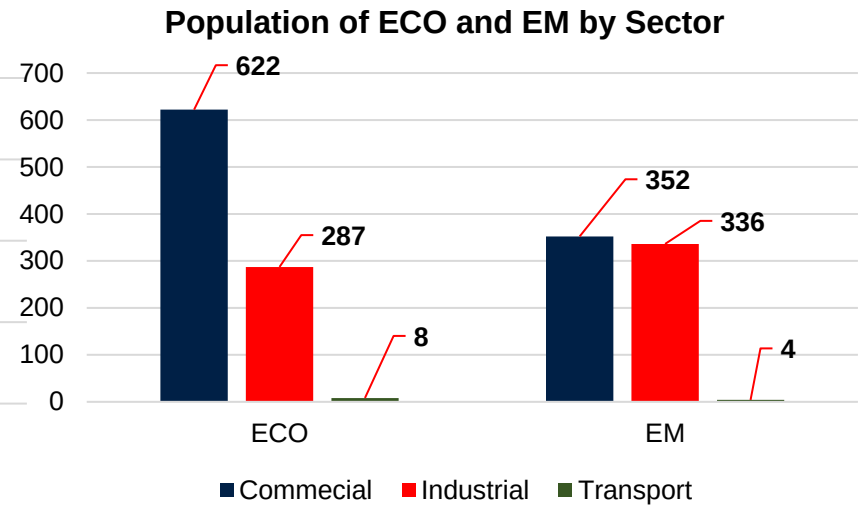
49.29% of Registered ECOs and ***41.47% of Registered EMs*** are in ***NCR***.

17.67% of ***Registered ECOs*** and ***12.14%*** of ***Registered EMs*** are ***female.***

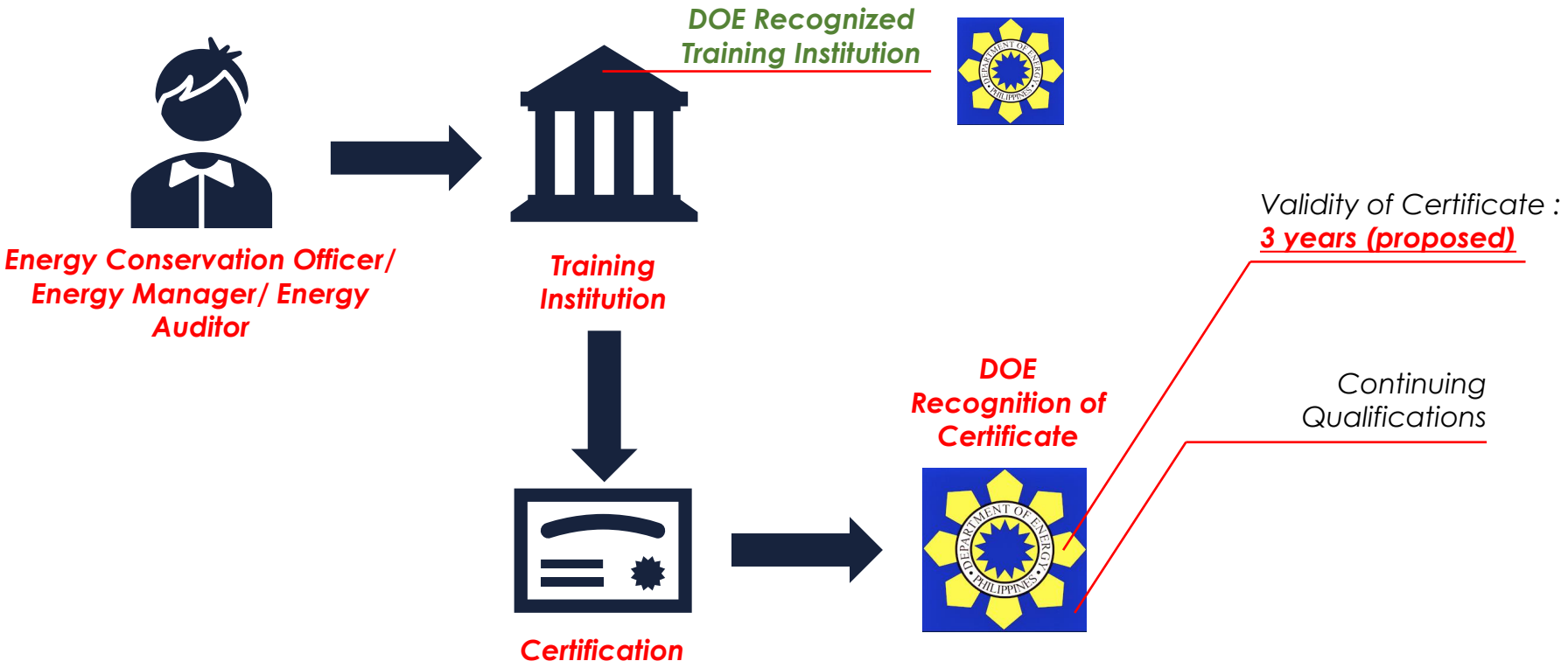
67.83% of ***Registered ECOs*** and ***50.87% Registered EMs*** handles ***Commercial DEs***



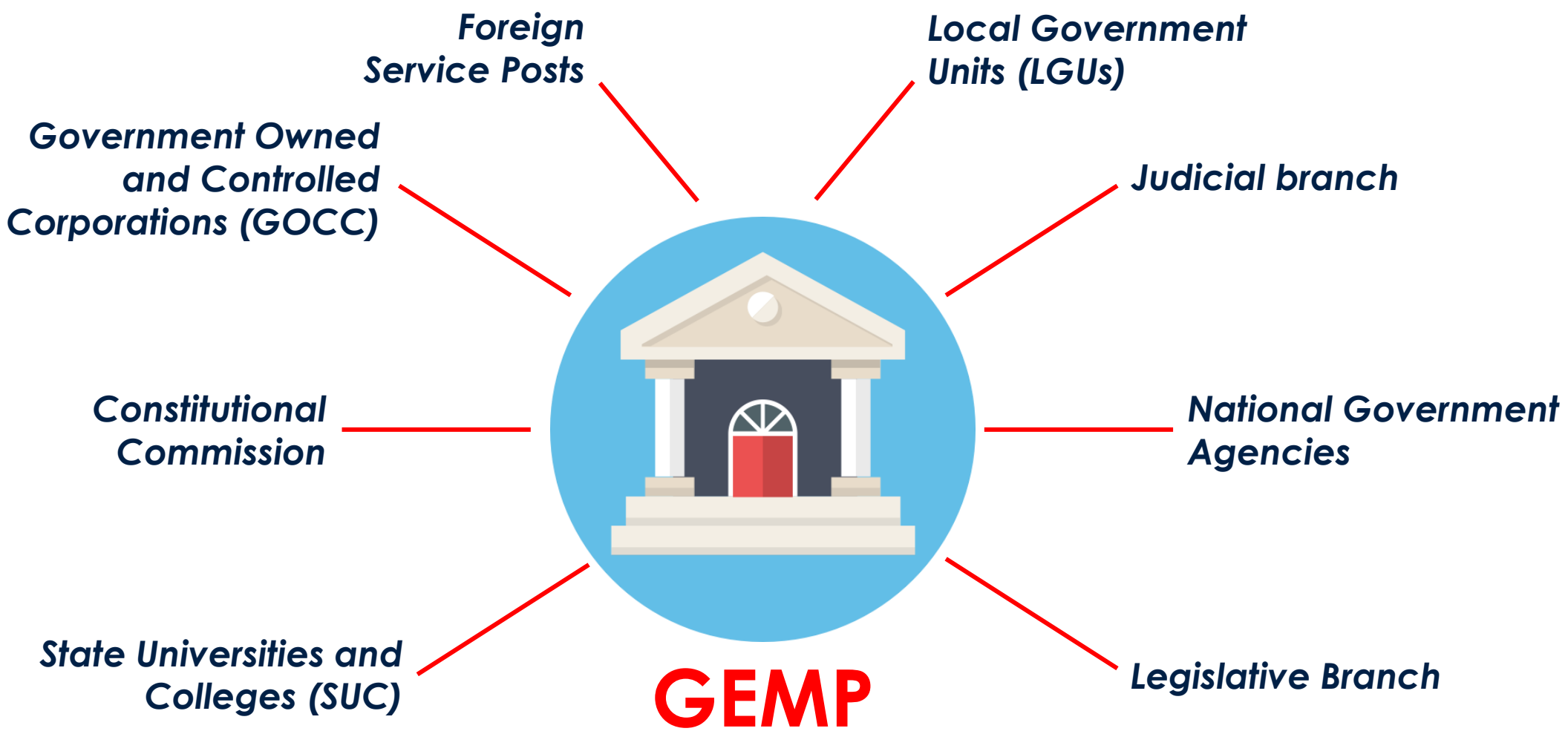




PROCESS OF CERTIFICATION



GOVERNMENT ENERGY MANAGEMENT PROGRAM (GEMP)



GOVERNMENT ENERGY MANAGEMENT PROGRAM (GEMP)

GEMP

=

10%

Reduction on monthly consumption of fuel and electricity

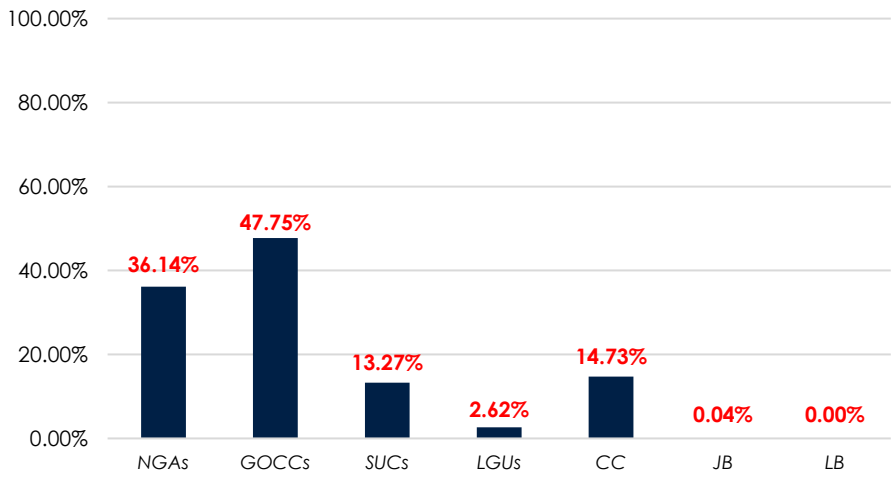
Pursuant to IAEECC Resolution No. 1

GOVERNMENT ENERGY MANAGEMENT PROGRAM

(As of 1st Quarter 2021)

Designation of EECO Percentage of Compliance

(Under the IAEECC Resolution No. 1, series 2020)



Classification	No. of Office	Designated EEC Officer and EEC Focal Person	
		No. of Office Complied	Percentage of Compliance
National Government Agencies (NGAs)	1,212	438	36.14%
Government-Owned and Controlled Corporations (GOCCs)	1,133	541	47.75%
State Universities and Colleges (SUCs)	113	15	13.27%
Local Government Units (LGUs)	1,717	45	2.62%
Constitutional Commission (CC)	672	99	14.73%
Judiciary Branch (JB)	2,592	1	0.04%
Legislative Branch (LB)	2	0	0.00%
Grand Total	**7,441**	**1,139**	**15.31%**

1,139 OFFICES

(15.31%) have Designated their EEC Officer and EEC Focal Persons

The total savings of ₱94.9M *(₱55.6M in Electricity and ₱39.4M in Fuel)* from the IAEECC Advisory: Enjoining All Concerned in the Government to Realize at least 10% in Cost Savings.

Electricity and Fuel Savings from the Executive Branch

Classification	No. of Office	IAEECC Advisory		Electricity		Fuel	
		No. of Office Complied	Percentage of Compliance	kWh	Php	Liter	PHP
NGA	1,212	167	13.78%	3,908,536.16	37,646,966.94	789,703.25	37,071,402.76
GOCC	1,133	20	1.77%	355,880.66	1,764,926.25	25,935.20	855,319.11
SUC	113	16	14.16%	1,506,067.96	16,160,729.05	36,753.42	1,438,437.63
LGU	1,717	0	0.00%	-	-	-	-
Total	**4,175**	**203**	**4.86%**	**5,770,484.78**	**55,572,622.24**	**852,391.87**	**39,365,159.50**

Designated Establishments

Refers to a private entity identified as energy intensive industries.

Annual Energy Consumption*

Other DE	*At least 100,000 kWhE but less than 500,000 kWhE*
Type 1 DE	*500,001 kWhE but less than 4,000,000 kWhE*
Type 2 DE	*4,000,001 kWhE and above*

Memorandum Circular No. MC2020-05-0001
Directing All Designated Establishments under Commercial, Industrial and Transport Sectors to Submit Energy Consumption Reports

Sectors of Designated Establishments:

- ***Commercial***
- ***Industrial***
- ***Transport***

**kWhE – to read as Kilowatt-Hour Equivalent*
** Combination of Fuel and Electricity*

OBLIGATIONS UNDER THE MEP

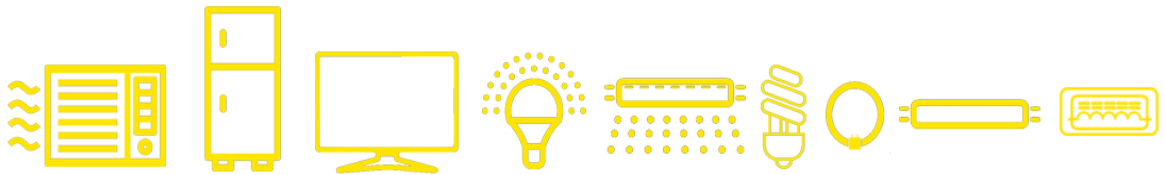
Sale, lease and import of MEP-compliant energy-consuming products

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

PHILIPPINE ENERGY LABELING PROGRAM

- 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.



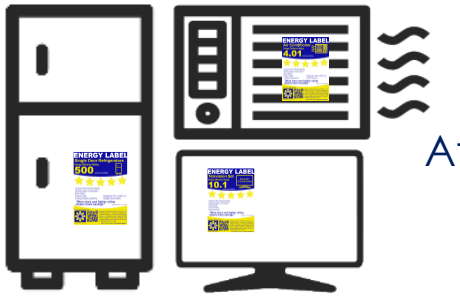
ENERGY UTILIZATION MANAGEMENT BUREAU

EPRED
ENERGY EFFICIENCY AND CONSERVATION PERFORMANCE REGULATION AND ENFORCEMENT DIVISION

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

RESPONSIBILITIES

(Manufacturers, Importers, Distributors and Retailers)



Attach Energy Label

Cooperate during the conduct of enforcement, monitoring, and verification activities.

Exhibit energy label in all publications

(e.g., TV and newspaper ads, leaflet/brochures, online trading activities, etc.)

Submit annually information on the inventory of sales of ECPs

NATIONAL ENERGY EFFICIENCY & CONSERVATION DATABASE

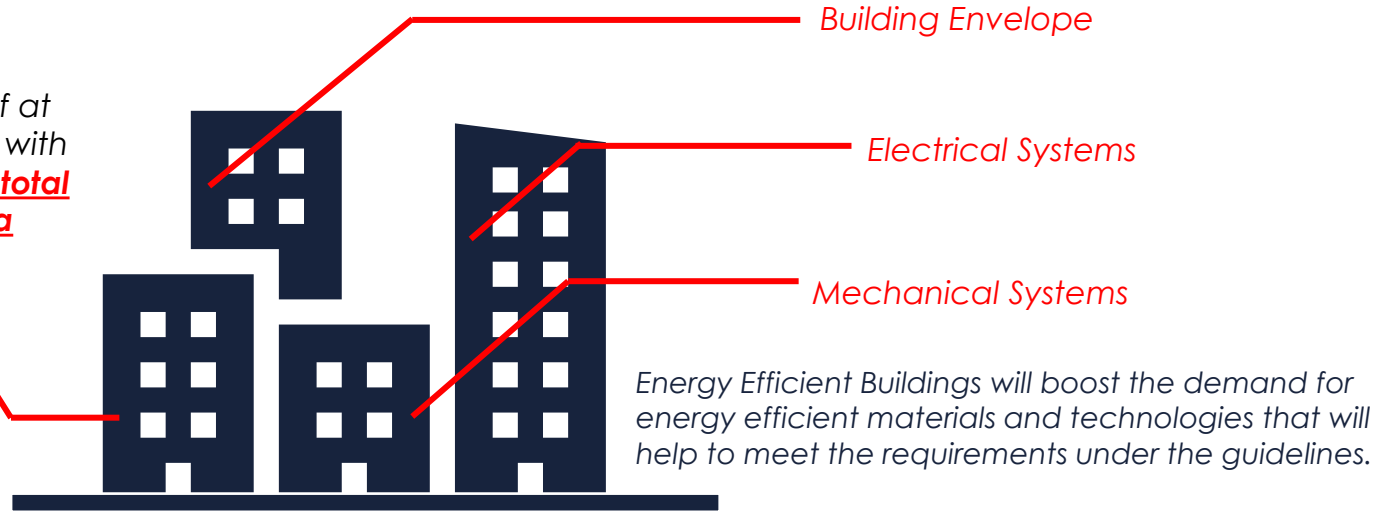
Development and Enhancement of Web-based National Energy Efficiency and Conservation Database (NEECD) System

The NEECD introduces an innovative processing of services such as PELP registration, submission of energy consumption data and reports, web-based processing, real time request and monitoring of status of application/submission, real time upgrading of data base and calculation of approximate energy savings from PELP, GEMP and EDSS implementation.

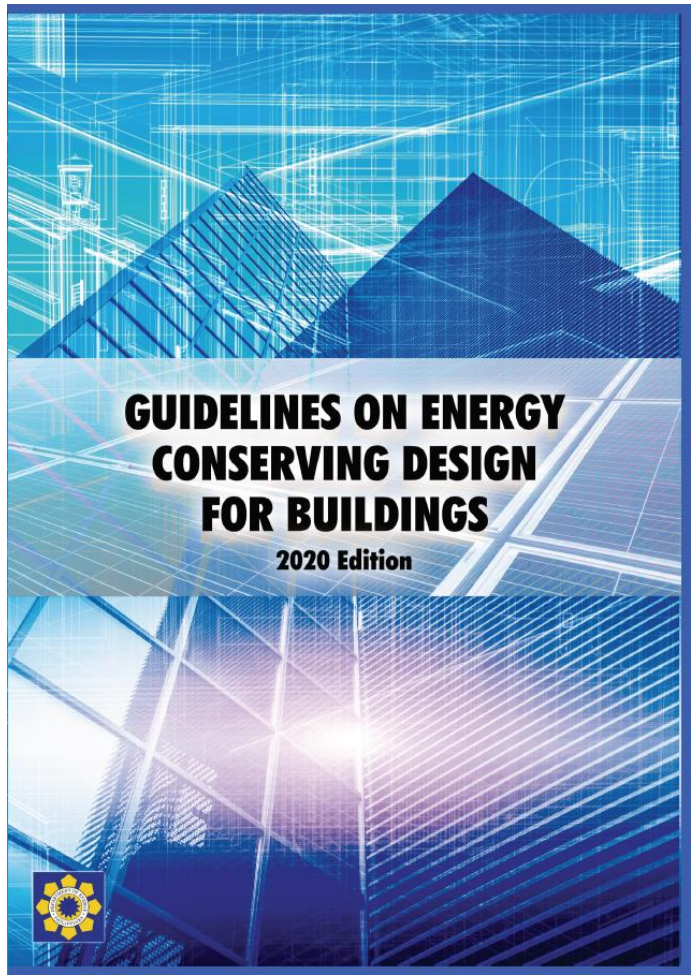
- Ongoing enhancement of modules for the Web-based Online Application and Database System for Philippine Energy Labeling Program (PELP), Government Energy Management Program (GEMP) and Energy Database System (EDSS), which includes the development of additional modules for LGU registration, EE&C report submission, payment gateway, notification system, interactive landing page, dashboard and analytics, smartphone responsive link, among others.

ENERGY CONSERVING DESIGN FOR BUILDINGS

To encourage and promote the energy conserving design of buildings and their services to reduce the use of energy with due regard to the cost effectiveness, building function, comfort, health, safety, and productivity of the occupants.



Energy Efficient Buildings will boost the demand for energy efficient materials and technologies that will help to meet the requirements under the guidelines.



DEPARTMENT CIRCULAR NO. DC2020-12-0026
Adoption of the Guidelines on Energy Conserving Design of Buildings

ENERGY CONSERVING DESIGN FOR BUILDINGS

To encourage and promote the energy conserving design of buildings and their services to reduce the use of energy with due regard to the cost effectiveness, building function, comfort, health, safety, and productivity of the occupants.

*Electrical loads of at least **112.5 kVA** or with at least **10,000 m² total gross floor area***

Energy Efficient Buildings will boost the demand for energy efficient materials and technologies that will help to meet the requirements under the guidelines.

APPLICATION

New buildings and their systems and any expansion and/or modification of existing buildings or systems with designed connected electrical loads of at least 112.5 kWA or has at least 10,000 m2 Total Gross Floor Area (TGFA)

EXEMPTION

Areas with industrial/ manufacturing process

DEPARTMENT CIRCULAR NO. DC2020-12-0026
Adoption of the Guidelines on Energy Conserving Design of Buildings

ENDORSEMENT OF EE PROJECTS TO BOI FOR FISCAL INCENTIVES

This Department Circular shall establish the guidelines, rules and procedures in the endorsement of energy efficiency projects to the BOI for registration in order to grant fiscal incentives to the proponents for the said project.

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

Simple Energy Efficiency Projects - involves new installation, upgrading or retrofitting of a specific equipment or devices in the system such as but not limited to lighting retrofit, automated lighting control system or smart control system, HVAC upgrades, boiler replacement, and other similar devices or equipment within a system.

Complex Energy Efficiency Projects - involves new installation, retrofitting or upgrading of system or a combination of systems. This includes Demand Side Management (DSM) Projects or any other innovative DSM schemes with the intention to lower down overall demand consumption in the grid, which project were being implemented by an electric distribution utility or ESCO.

IMPLEMENTATION STATUS ON INCENTIVES

FISCAL INCENTIVES

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

Project Application → *20 Days Processing Time* → DOE Endorsement to BOI

EVALUATION CRITERIA. *EE projects should meet 15% savings threshold measured at the boundary in order to access the following rates of Income Tax Holiday (ITH).*

Annual Energy Savings at the Project Boundary	ESCO or TPPD Rate of ITH	Self-Financed Amount of ITH
Less than 15%	0% but registration shall not be cancelled	None, but registration shall not be cancelled
15% to 20%	50%	30% of cost installed EE&C equipment
More than 20% and up to 25%	75%	40% of cost installed EE&C equipment
More than 25%	100%	50% of cost installed EE&C equipment

BOI MC 2021-001 GENERAL POLICIES AND SPECIFIC GUIDELINES TO IMPLEMENT THE 2020 INVESTMENT PRIORITIES PLAN

***All registered EEC projects shall be granted with Pioneer Incentives**, if the said EEC Project or Enterprise is registered as a Pioneer Project or Enterprise in accordance with E.O. 226.*

APPLICATION REQUIREMENTS

REQUIREMENTS	Self-financed Projects or TPPD/Project SPV	ESCO Initiated Projects
Application letter indicating the intent to avail for BOI incentives	✓	✓
Application Form	✓	
Certified True Copies of the Documents on Corporate Personality	✓	
Copy of Energy Audit Report duly signed by a Registered or Certified Energy Auditor	✓	✓
Copy of DOE issued Certificate of Registered ESCO or Certified ESCO		✓
Copy of Project Contract or Energy Saving Performance Guarantee Contract		✓
Project Profile	✓	✓
Proof of Payment for Simple Energy Efficiency Project and Complex Energy Efficiency Project	✓	✓

OBLIGATIONS UNDER THE ISSUED ENDORSEMENT

Submit a Project Completion Report for ESCO and TPPD/SPVC initiated project or Project Commissioning Report (PCR) for Self-finance projects initiated by the Owner to EUMB not later than thirty (30) calendar days upon completion or before the commercial operation of the energy efficiency project/s using the form prescribed in Annex F.

Submit a Monthly Project Progress Report using the prescribed form (Annex G) during the progress of installation as well as during its commercial operation which shall end based on the estimated payback period.

Subject themselves and their projects to an independent verification by the DOE upon the issuance of the guidelines for the same; and

Such other requirements as may be required by the DOE for the attainment of the objectives of the EEC Act and EEC IRR.

UNDER NON-FISCAL INCENTIVES

GREEN BUILDING AWARDS 2020

2 ***Awardees for Small/Medium Building Category***

11 ***Awardees for Large Building Category***

For Small/Medium Building Category

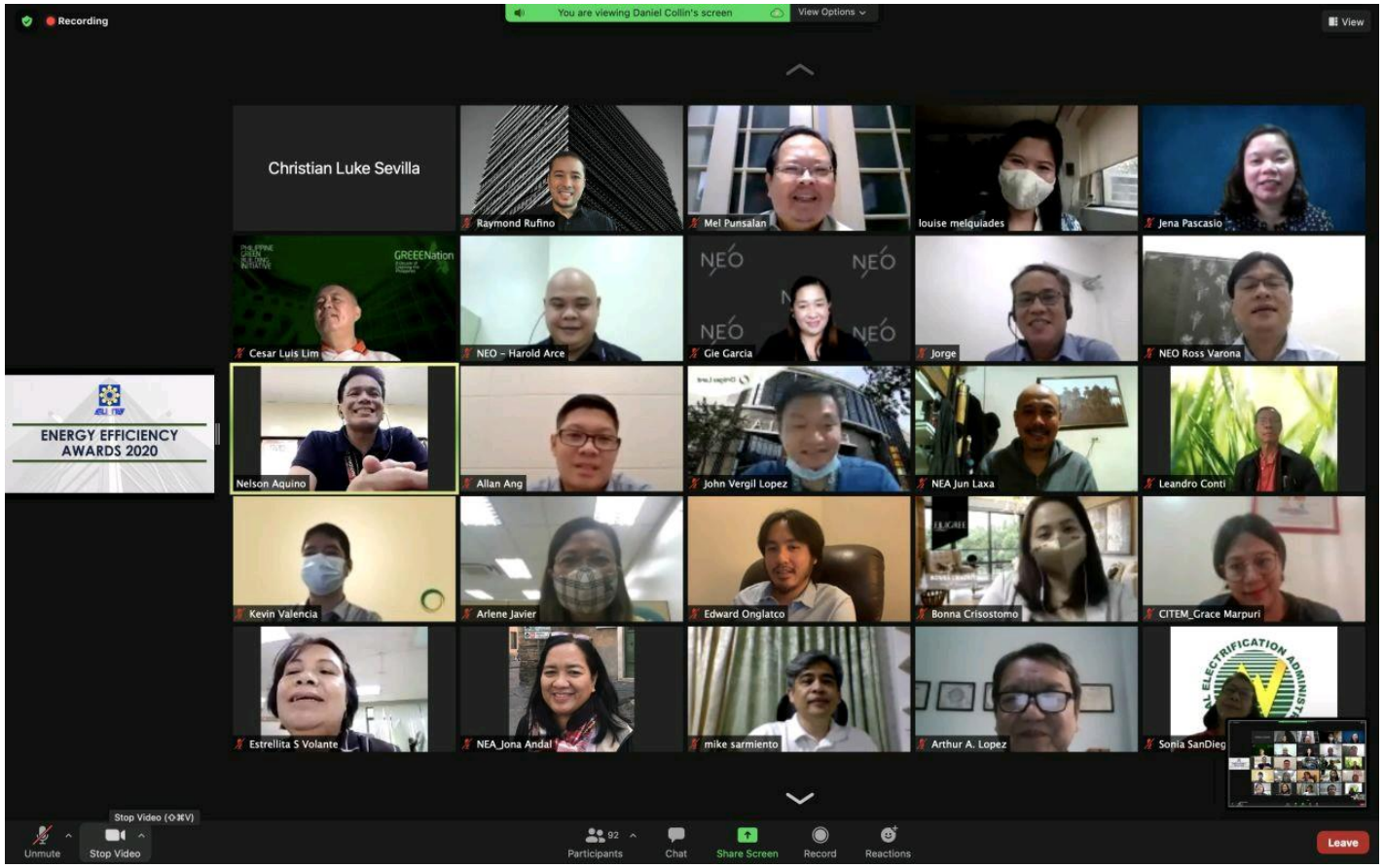
1. **Hyundai Cebu South Dealership**
   by Hyundai Asia Residences, Inc.
2. ***Botanika Nature Residences***
   by Filinvest Alabang Inc.

For Large Building Category

1. **Arthaland Century Pacific Tower**
   by Arthaland Corporation
2. **Arya Residences**
   by Arthaland Corporation
3. **Estancia**
   by Ortigas Land Corporation
4. **one/NEO**
   by N – One BG Properties, Inc.
5. **two/NEO**
   by N – Square BGC Properties, Inc.
6. **three/NEO**
   by N – Cube BGC Properties, Inc.
7. **five/NEO**
   by N – Plaza BGC Properties, Inc.
8. **six/NEO**
   by N – Lima BGC Properties, Inc.
9. **seven/NEO**
   by N – Park BGC Properties, Inc.
10. **Hyundai Logistics Center**
    by Hyundai Asia Residences, Inc.
11. **National Museum of Natural History**
    by Office of the President of the Philippines

UNDER NON-FISCAL INCENTIVES

AWARDEES OF THE GREEN BUILDING AWARDS 2020



UNDER NON-FISCAL INCENTIVES

ASEAN ENERGY EFFICIENCY AND CONSERVATION AWARDS

ASEAN Energy Management Award in Buildings

ASEAN Award on Energy Efficient Building

ASEAN Award on Green Building

*Endorsed applications by DOE to the **2021 ASEAN Energy Efficiency and Conservation Awards**:*

ENERGY MANAGEMENT - LARGE INDUSTRY CATEGORY
- *Ayala Center Makati - District Cooling System*

TROPICAL BUILDING CATEGORY
- *Bonifacio High Street*

NEW AND EXISTING BUILDING CATEGORY
- *Bonifacio Stopover Corporate Center*

ENERGY MANAGEMENT - LARGE BUILDING CATEGORY
- *UP Techno Hub*
- *Six/NEO*

RETROFITTED CATEGORY
- *Petron Mega Plaza*

GREEN BUILDING – LARGE BUILDING CATEGORY
- *Arthaland Century Pacific Tower*
- *Seven/NEO*

PHILIPPINE AWARDEES ON THE 2021 ASEAN EE&C AWARDS

BONIFACIO HIGH STREET
2ND Runner-up
Tropical Building Category

ARTHALAND CENTURY PACIFIC TOWER
2ND Runner-up
Green Building – Large Building Category

UNDER NON-FISCAL INCENTIVES

GEMP AWARD 2020

5 *Awardees for the Government Energy Management Program Award*

1. *National Power Corporation*
2. *National Electrification Administration*
3. *Development Academy of the Philippines*
4. *Center for International Trade Exposition and Missions*
5. *National Transmission Corporation*

EE PROJECTS BY DESIGNATED ESTABLISHMENTS

(As of April 2021)

EE Projects and Measures

System Retrofitting

- LED installation
- Use of inverter technology
- Installation, use of temperature, pressure sensors and transmitters for system optimization
- System re-piping works and other system improvement

Equipment Maintenance

- Equipment annual maintenance work
- Any maintenance of existing equipment: cleaning, de-scaling, repairs, rehabilitation works

Equipment Acquisition

- Acquisition of Large-scale equipment such as processing equipment and chiller systems / units
- Replacement Motor control centers, transformers, Motors, compressors,
- Acquisition of automated systems such as SCADA, Building management systems, alarm management systems

***Total Investment Cost** of*

Php 15 Billion

was observed in 2020 based on the projects executed by the DEs from the Commercial, Industrial, and Transportation Sectors.

*These projects as a total kWh/year **savings** of*

***120,464,478 kWh** or around*

Php 1,084,180,301.00[1]

[1] *120,464,478 kWh x Php9/kWh = ₱1,084,180,301 of energy savings. Rate Assumption: ₱9/kWh*

EE PROJECTS BY ENERGY SERVICE COMPANIES

(As of April 2021)

Total Investment Cost of

₱689.05M

on EE projects of undertaken by the registered Energy Service Companies in 2020.

Total Energy Savings of

₱209.8M[1]

based on the kWh per year saving of the ESCO EE projects

Project Name	Project Cost in Million Pesos (₱)	Energy Saving (kWh/year)
Office Building Air-cooled Conversion	77.0	2,565,696
Chilled Water Plant Retrofit	47.5	1,939,798
Water-cooled Packaged A/C System Retrofit	101.5	2,674,736
Replacement of Centrifugal Water-Cooled Chiller	19.0	635,000
Chilled Water Plant and BMS Retrofit	258.0	5,212,000
Conversion of Air-cooled Chiller Plant to Water-cooled Chiller Plant	34.51	4,380,000
Industrial Refrigeration Retrofit	56.0	2,564,640
Replacement of standard efficiency motors (SEM) with high efficiency motors (HEM)	82.16	3,010,200.00
Lighting System Retrofit	13.38	330,341.52
Total	**₱689.05M**	**23,312,411.52 kWh/year**

Note: The above-mentioned Sample EE Projects were undertaken by Energy Service Companies (ESCOs) with the corresponding investment cost and equivalent energy savings.

[1] *23,312,411.52 kWh x Php9/kWh = ₱209,811,703.68 of energy savings. Rate Assumption: ₱9/kWh*

EUMB Information Campaign Activities

energyability
FOR ENERGY EFFICIENCY AND SECURITY

E - POWER MO
#WeHaveTheEnergyAbility

Social Media Content

EE&C Campaign Cycles

Hot, Dry Season
(March, April, May)

Christmas Season
(October, November, December)

THANK YOU