



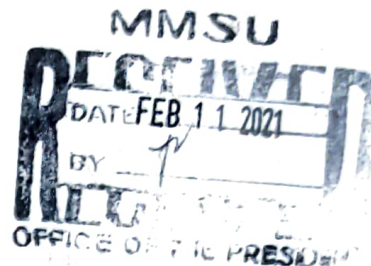
MARIANO MARCOS STATE UNIVERSITY

Pursuant to Republic Act No. 11285, An Act Institutionalizing Energy Efficiency and Conservation, Enhancing the Efficient Use of Energy and Granting Incentives to Energy Efficiency and Conservation Projects, the Department of Energy is mandated to lead and ensure its implementation. The DOE conducted virtual energy audit and information drive during that time. This led to the review of the 2006 University Guidelines and Policies on Energy Utilization, Conservation and Generation to ensure compliance and responsiveness to the latest government policies (RA No. 11285, Energy Efficiency and Conservation Act) and to the challenges on energy and climate change. The reviewed and revised policy last February 2021 continue to be in effect and the basis for energy efficient renovations and new builds.



MARIANO MARCOS STATE UNIVERSITY

Energy Management Committee



February 9, 2021

DR. SHIRLEY C. AGRUPIS

President
This University

Madam,

Greetings from the Energy Management Committee.

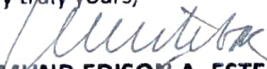
In compliance with your memorandum (Memo NO. 21-058) to convene the Energy Management Committee and draft the Energy/Power generation and utilization policy of the university, we are submitting the copy of such policy/guidelines for your perusal and approval.

Without preempting your approval, the committee recommends the implementation of the Energy Efficiency and Conservation Practices to all units of the university. JØ

Looking forward always to your usual support.

Thank you.

Very truly yours,


EDMUND EDISON A. ESTEBAN

Chair


NATHANIEL ERICSON MATEO

Co-Chair

*Approved for
immediate
implementation. [signature]*

ENERGY/POWER GENERATION AND UTILIZATION IN MMSU

INTRODUCTION

The Mariano Marcos State University is a comprehensive institution of higher learning in the Ilocos Region which was established in January 6, 1978 by Presidential Decree (PS) 1279 which merged two state colleges in the Province of Ilocos Norte, the Mariano Marcos Memorial Colleges of Science and Technology (MMCST) with campuses in Batac, Currimao, Paoay and Dingras, and the Northern Luzon State College (NLSC) in Laoag City.

The University has eleven academic units : Graduate School (GS), College of Medicine (COM), College of Law (COL), College of Health Sciences (CHS), College of Business Economics and Accountancy (CBEA), College of Agriculture, Fisheries and Sustainable Development (CAFSD), College of Arts and Sciences (CAS), College of Engineering (COE), College of Teacher Education (CTE), College of Industrial Technology (CIT), College of Aquatic Sciences and Applied Technology (CASAT).

The main campus is located in Batac City with a land area of about 300 hectares. It houses the University Administration Building , seven academic units (COM, COL, CHS, CBEA, CAFSD, CAS, COE), MMSU Hostel, University Library, Student Center, Crop Research Laboratory, Teatro Ilocandia. There are two other campuses in Laoag City housing the two academic units respectively, Campus 1 –CTE and GS, Campus 2-CIT. The Campus in Currimao houses the academic unit CASAT and the Campuses in Dingras and Paoay are satellite campuses of the CAF and CIT respectively.

The university envisions to be a premiere Philippine university by the year 2028 and has a mission to develop virtuous human capital and sustainable innovations in a knowledge-driven global economy.

POWER INFRASTRUCTURE

The university receives its power from the local utility – the Ilocos Norte Electric Cooperative (INEC) via a single service entrance located inside the main campus. The power distribution system inside the main campus which includes the primary and secondary lines, line supports (poles/towers), all transformers in buildings including all accessories are owned and managed by the university (pls see attached layout).

The power distribution system is a 13.2 KV, 60 hz, three phase line extending to all the buildings and facilities in the main campus that require electric power. Distribution transformers to step down the primary voltage of 13.2 kV into 220V utility voltage are provided in each load center (buildings).

The following is the list of transformers of various sizes and ratings that are installed in the main campus of the university:

EMERGENCY POWER SOURCE

The university has four large backup power sources (50kVA and higher) from diesel generator sets that operates as emergency power units. These generator sets are stationed at the following sites :

1. Administration Building – 250 kVA Diesel Generator set
2. Science and Technology Park - 250 kVA Diesel Generator set
3. Communication Arts Building – 250 kVA Diesel Generator set
4. Main Library Building - 50 kVA Diesel Generator set

In addition to these generator sets, small units with ratings less than 5 kVA are used by some or the units of the university as emergency power to run critical electrical loads such as computers, printers, laboratory apparatus and the like during power outages.

IN-HOUSE POWER GENERATION

In-house power generation is the production of local power using the resources of the university which are not classified under the emergency power sources above. These facilities can be produced from renewables or fossil based plants.

Presently there are two 10 kW hybrid solar (renewable) power installation in the university. One 10 kW hybrid unit was installed at the CRL lab building and another 10 kW hybrid unit at the NBERIC building. These units are capable of producing electric power for the buildings consumption and excess can be sold out to the grid (utility) via net-metering.

There is also a proposed (MOA signed with DOE-PNOC) 200 kW grid-tied solar (renewable) rooftop installation for some buildings in the main campus of the university. One 100 kW installation for the Admin Building, 60 kW for the COE and another 40 kW for the Main Library building. When completed, the facility will save some electricity bills of the university.

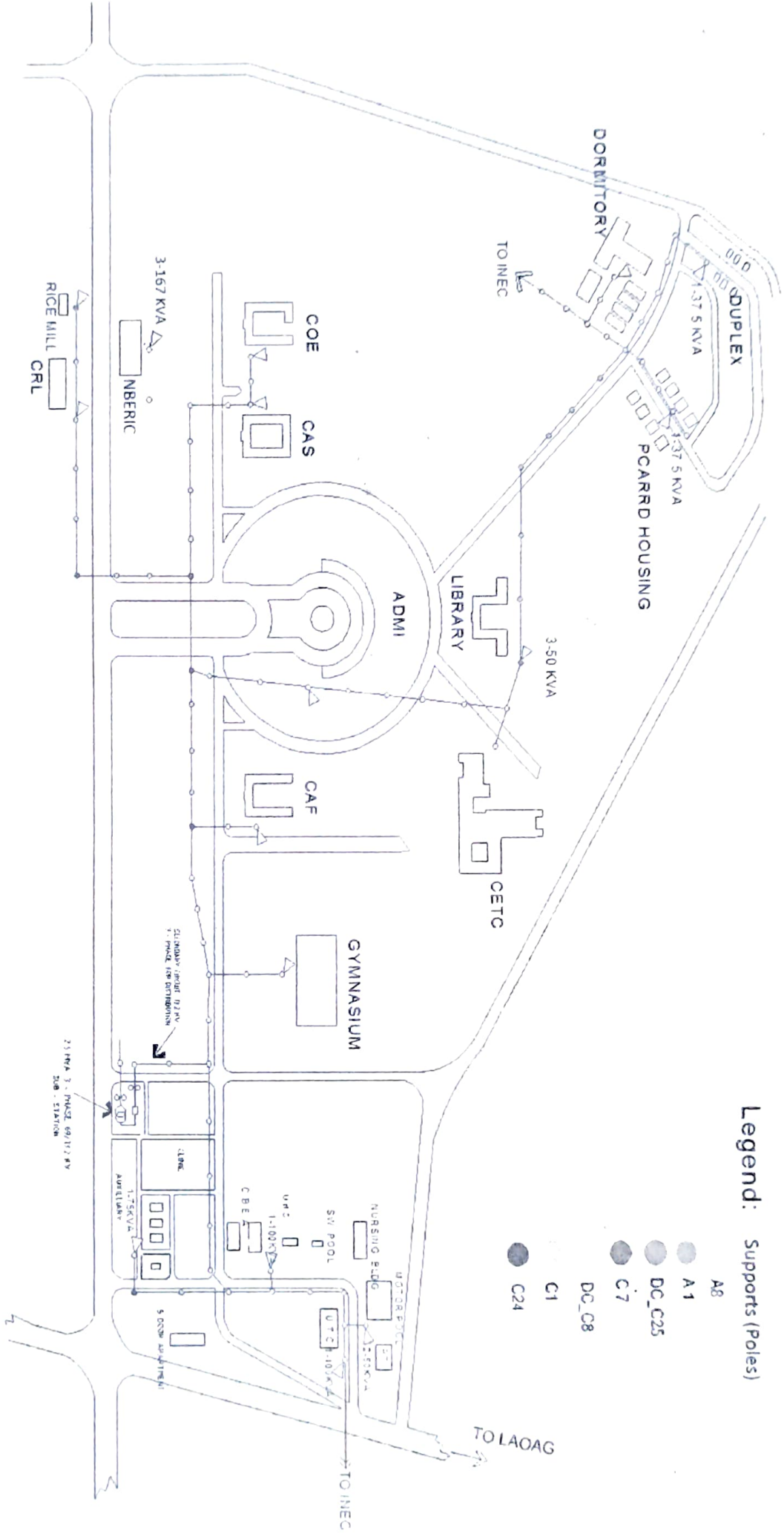
ELECTRICAL CONSUMPTION

The university consumes an average of more than 100,000 kW-hr of electrical energy every month. The following is the average demand in each load center. This energy is mainly supplied and paid to the local utility – the Ilocos Norte Electric Coop (INEC).

Local or in-house power generation such as renewable sources can reduce the university's dependence from the grid.

To help reduce the energy consumption in the university an energy efficiency and conservation program shall be implemented in all units of the university. It is the least cost (or no cost) way of reducing energy consumption, however it involves the participation and commitment of all the constituents.

ELECTRICAL POWER DISTRIBUTION OF MMSU, BATAAC CITY



Legend: Supports (Poles)

- A8
- A1
- DC_C25
- C7
- DC_C8
- C1
- C24

LIST OF POWER TRANSFORMERS INSTALLED IN THE VARIOUS ENERGY CENTERS IN MMSU

MAIN CAMPUS

	ENERGY CENTER	QTY	RATING (KVA)
1	MANSION	1	75 (1Ø)
2	UTC	3	75
3	NACIDA OLD	3	167
4	NACIDA NEW	3	75
5	COM	3	50
6	CHS	3	100
7	SWIMMING POOL	3	25
8	COL	1	50 (1Ø)
9	INFIRMARY, HS	1	100 (1Ø)
10	CBEA1	1	100 (1Ø)
11	CBEA2	3	75
12	STUD CTR	1	150 (3Ø)
13	TEATRO	3	100
14	GYMNATORIUM	3	333
15	CAFSD	3	100
16	ADMIN	3	167
17	CIMEA	3	100
18	LIBRARY	3	50
19	COE	3	100
20	CAS	3	167
21	CAB	3	167
22	NBERIC	3	167
23	CRL	3	167
24	DORMITORIES	3	25
25	HOUSING	1	100 (1Ø)

CTE CAMPUS

	ENERGY CENTER	QTY	RATING (KVA)
1	CTE Admin	3	50
2	CTE H.S.	3	25
3	CTE Elem.	3	37.5

CIT CAMPUS

1	CIT	3	50
2	CIT New	3	75

CASAT CAMPUS

	CASAT	2	50 (Open V)
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PAOAY CAMPUS

	Paoay	1	50 (3Ø)
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DINGRAS CAMPUS

	Dingras	3	25
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ENERGY GENERATION/UTILIZATION POLICIES

ENERGY POLICY ON NEW INFRASTRUCTURE

The following are recommended guidelines (policies) on the construction of new infrastructures (buildings and facilities)

SOLAR ENERGY GENERATION

- Readiness (Adaptability) .
 - Designs of new buildings should integrate/incorporate the option for the construction of solar power facility (solar panels and accessories).
 - Roof deck (roof integrity) must be considered in the designs.
 - Consideration of south facing roof (around 18°) are recommended.
 - Provision for the integration of interconnectivity with the grid/utility with net-metering.

DIESEL/GASOLINE GENERATOR SETS FOR POWER GENERATION (for 50 kVA and larger)

- Consideration of generator sets as standby units for power generation (not only during emergencies)
- Consideration of standby generator sets to operate on renewable fuels (such as biofuels – hybrid with fossil fuel)
- Maintenance program for generator sets should be in place and to be strictly observed.

NET-METERING

- To optimize the potentials of distributed generation in the university, all generation facilities (large capacity) especially on renewables (solar) should consider net-metering scheme.

POLICIES (GUIDELINES) ON ENERGY UTILIZATION

The following are recommended for new and existing buildings and facilities :

- Consideration of the integration of *green technologies* but not limited to :
 - The use of Inverter types of air conditioning units for new installations
 - Application of roof insulation for air conditioned areas.
 - Use CERAMIC FIBER (and the like)
 - Use of LED lamps or high efficiency lights in buildings/facilities including street lighting
 - Consideration of Appropriate Building Orientation for new buildings to optimize energy conservation.
 - Provision of sufficient shade (canopies) for outdoor units of split-type air conditioning units.
- Periodic conduct of spot and detailed energy accounting and audit (electricity, water, fuel) by energy auditors within all energy centers of the university.
 - Spot energy audit – as often as possible (can be done by coordinators)
 - Detailed energy audit – at least one every three years (to be done by energy auditors)
- Implementation of a university wide Energy Efficiency and Conservation Technologies and Practices. (PIs see attached)

ENERGY EFFICIENCY AND CONSERVATION PRACTICES

A. AIRCONDITIONING UNITS (ACU load accounts to more than half of the total energy consumed by the building)

1. Air conditioners are switched on at 9:00 AM and switched off at 4:00 PM except for computer and laboratory classes.
2. Aircon units are switched off or set at fan mode during lunch break (12:00 – 1:00 PM)
3. Check that the thermostat is working and set to not lower than 25°C (room temperature). For every degree higher translates to around 10% savings
4. Air conditioned offices (areas) are well insulated from direct sunlight or heat (like curtains, blinds, indoor plants). Automatic door closer maybe installed.
5. Air conditioning units should be cleaned and maintained periodically.

B. ELECTRIC FANS (AND OTHER FANS)

1. Electric fans are switched off when not in use. Electric fans in classrooms are switched off after every class
2. If cooling is desired in one direction only, the oscillator is locked where the fan is needed except for ceiling fan
3. If comfortable enough the fan is set to "low"
4. Exhaust fans are switched off while the ACUs are in operation (where applicable).
5. Agricultural and other pumps (electric) should be properly maintained and accounted.

C. LIGHTING (ILLUMINATION)

1. Incandescent lamps should be replaced with compact fluorescent lamps (CFL) or LED lamps (or high efficiency lamps)
2. Lighting fixtures (reflectors, luminaires) are cleaned regularly.
3. Busted fluorescent lamps are replaced or removed.
4. Light are to be switched off or reduced where there is natural light.

D. OFFICE EQUIPMENT/APPLIANCES COMPUTERS/PRINTERS

1. Computers should be strictly for official use only.
2. Computers are switched off when not in use (both CPU and monitor) or set to energy-saving mode.
3. Playing computer games or playing music in PC should be prohibited.
4. Laserjet printers are advisable not to be turned-off if it will be used again later on.

E. OTHER APPLIANCES

1. Refrigerators are switched off during weekends/holidays and long vacations (except when necessary).
2. Ovens and electric stoves in offices are prohibited except for laboratory activities.
3. Watching TV is not allowed during office hours except for instructional purposes.
4. Check water system (plumbing) against leaks. (leaks are energy lost)
5. Unplug all water dispensers (and the like) before leaving the office.
6. For new procurement of IT equipment laptops maybe considered in lieu of desktops (laptops consume less energy -around more than 50%).

F. MOTOR VEHICLES/MACHINERIES

1. Motor vehicles should undergo regular preventive maintenance.
2. Only certified road worthy vehicles are allowed to travel.
3. Prolonged idling in vehicles should be avoided.
4. Dispose vehicles that are very old. They become less roadworthy and they become fuel inefficient.
5. Agricultural and other pumps (using fuel) should be properly maintained and accounted.



NOTICE OF MEETING

To : **All Members of the Recomposed
University Energy Management Committee (UEMC)**

Engr. Nathaniel Ericson R. Mateo, Co-Chair
Engr. Odette R. Alegato
Engr. Thomas D. Ubiña
Engr. Rogello U. Binala
Engr. Wilson R. Duldulao
Engr. Romario G. Ascaño
Engr. Ian V. Romas
Mr. Louie T. Rugulan

Mr. Michael Balanay, Chief, Elec'l Section, GSD
Mr. Ariel Gavino, Electrician, GSDD
Engr. Walter John Iduria, ME Department

From : 
ENGR. EDMUND EDISON A. ESTEBAN
Chair, University Energy Management Committee

Date : December 9, 2020

Subject : Committee Meeting

Let us please convene on December 10, 2020 at 2:00 P.M. at the COE Conference Room to discuss and tackle the following agenda:

1. Virtual walk-through audit in MMSU by DOE on December 15, 2020.
2. Documents and other requirements for submission and accomplishments for the compliance of RA 11285 – Energy Efficiency and Conservation Act.
3. Other Matters

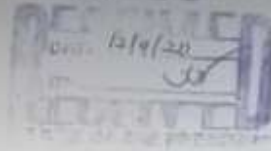
Please come personally on time.

Thank you.



MARIANO MARCOS STATE UNIVERSITY

Energy Management Committee



December 7, 2020

DR. SHIRLEY C. AGRUPIS
President
This University

Dear Madam President,

Greetings!

This is to inform you that the committee has attended the virtual meeting/seminar on Energy Efficiency and Conservation (Republic Act 11285 enacted in 2019) sponsored by the DOE on December 7, 2020.

The RA mandates that government agencies including state universities and colleges should establish a Government Energy Management Program to be implemented in their respective organizations.

In that regard, the DOE had informed and provided us initial documents/ requirements to comply with the above RA (attached).

Furthermore, the DOE had scheduled a virtual walk-through Energy Audit in MMSU on December 15, 2020. If the date is ok with you madam president, we will inform them to go ahead with the activity.

May we then request that we conduct a meeting of the University Energy Management Committee on December 10, 2020 at 2:00 o'clock in the afternoon at the COE Conference room to discuss the preparation and compliance to the above requirements.

Rest assured madam that health protocols to avoid the spread of the Covid-19 virus will be observed during the said meeting.

May I also request that snacks will be served to the participants of the said meeting.

Always looking forward to your full support to our endeavors.

Thank you.



Very truly yours,

EDMUND EDISON A. ESTEBAN
Chair, Energy Mgmt. Committee

Noted:

DR. NATHANIEL R. AUBUYOG
Dean, COE

*Planned coordination w/ Mr. Feby
A. re my schedule. fj*



Republic of the Philippines
DEPARTMENT OF ENERGY
Energy Utilization Management Bureau



27 November 2020

DR. SHIRLEY C. AGRUPIS
President
MARIANO MARCOS STATE UNIVERSITY
Batac City, Ilocos Norte
(077) 792-3191; 792-3507
www.mmsu.edu.ph
opb@mmsu.edu.ph
mmsuop@yahoo.com

Dear Dr. Agrupis:

With the passage of Republic Act No. 11285 or the Energy Efficiency and Conservation Act (EEC Act), the Department of Energy (DOE), as lead agency, together with other government agencies are tasked to institutionalize energy efficiency and conservation as a national way of life geared towards developing our country.

Through IAEECC Resolution No. 1, all government entities shall comply with the Government Energy Management Program (GEMP) which is the government-wide program to reduce the government's monthly consumption of electricity and petroleum products through electricity efficiency and conservation, and efficiency and conservation in fuel use of government vehicles, among others. Likewise, all government entity heads are directed to designate an Energy Efficiency and Conservation Officer (EECO) who shall, among others, prepare, formulate and submit for approval of the head of the agency concerned the design, plan, implementation, and monitoring and evaluation scheme for the Energy Efficiency and Conservation projects of said agency consistent with the GEMP.

In line with this, the DOE will conduct **virtual** Information, Education and Communication (IEC) campaigns that aim to give updates on the responsibilities of Government Agencies under the EEC Act, Government Energy Management Program (GEMP) and the Inter-Agency Energy Efficiency and Conservation Committee (IAEECC) including Resolution No. 1, series of 2020.

In this regard, **we would like to invite you and your representatives to participate in a virtual IEC Campaign on GEMP to be held on December 2, 2020 at 8:30 AM to 12:00 NN.** You may register through the online form via <https://bit.ly/registrationregion3> until December 1, 2020. We will provide the link to the webinar platform upon registration. Please see Attachments – IEC Program and IAEECC Resolution.

For clarifications and questions, please feel free to contact Mr. Victorino G. Getalado, Jr. (victorino.getalado@doe.gov.ph) and Mr. Crizaldo G. Santos (saldosantos@yahoo.com) (632) 8840-2243 or (632) 8479-2900 loc. 277/272/201/214.

Very truly yours,

DIR. PATRICK  AQUINO, CESO III
Director IV

Energy Center, Rizal Drive cor. 34th Street, Bonifacio Global City, Taguig City, Philippines. 1632
Tel. No. (Toll-free) (032) 8479-2900
Website: <http://www.doe.gov.ph>; Email: doe.eumb@gmail.com



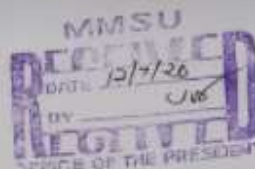


Republic of the Philippines
DEPARTMENT OF ENERGY
Energy Utilization Management Bureau



04 December 2020

DR. SHIRLEY C. AGRUPIS
President
MARIANO MARCOS STATE UNIVERSITY
Batac City, Ilocos Norte
(077) 792-3191; 792-3507
op@mmsu.edu.ph, mmsuop@yahoo.com



Attn: **MR. EDMUND EDISON A. ESTEBAN**
University Energy Committee Chairman
edmundedison@yahoo.com

Dear Dr. Agrupis:

Pursuant to Republic Act, No. 11285, An Act Institutionalizing Energy Efficiency and Conservation, Enhancing the Efficient Use of Energy, and Granting Incentives to Energy Efficiency and Conservation Projects, the Department of Energy is the lead agency mandated to ensure its implementation.

Section 9 of the EEC Act states that an Inter-Agency Energy Efficiency and Conservation Committee (IAEECC) is created to evaluate and approve government energy efficiency projects, and to provide strategic direction in the implementation of the Government Energy Management Program (GEMP).

Section 37. Powers and Functions of IAEECC are to conduct surveys, audits, technical analysis, and other research or investigations related to energy efficiency projects, among others.

The walkthrough energy audit or on-the-spot check is a type of energy audit conducted in government facilities by the Energy Audit Team (EAT) of the DOE.

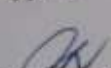
As the DOE transitions to the new normal, the said walkthrough energy audit will be performed virtually.

In view of the above, may we request you to join the virtual energy audit orientation at 1:00 pm - 3:00 pm on 07 December 2020 via MS Teams. The attendees from your end must be the Energy Efficiency & Conservation Officer (EECO), EEC Focal Person (EECFP) and personnel who handles the monitoring of your monthly electricity and fuel consumption, inventory of air-conditioning units/lighting system, familiar about your office internal policies concerning energy conservation, and informed about your building total gross floor area and conditioned floor area.

For clarifications and questions, please feel free to contact Mr. Victorino G. Getalado, Jr. (victorino.getalado@doe.gov.ph) and Mr. Crizaldo G. Santos (csaldosantos@yahoo.com) (632) 8840-2243 or (632) 8479-2900 loc. 277/272/201/214.

Thank you very much.

Very truly yours,


DIR. PATRICK T. AQUINO, CESO III
Energy Utilization Management Bureau

Energy Center, Rizal Drive cor. 34th Street, Bonifacio Global City, Taguig City, Philippines, 1633
Tel. No. (Thailand) (632) 8479-2900
Website: <http://www.doe.gov.ph>, Email: doe.pamb@gmail.com



S. No. 1531
H. No. 8629

Republic of the Philippines
Congress of the Philippines
Metro Manila

Seventeenth Congress

Third Regular Session

Begun and held in Metro Manila, on Monday, the twenty-third
day of July, two thousand eighteen.

— ■ —
[REPUBLIC ACT NO. 11285]

AN ACT INSTITUTIONALIZING ENERGY EFFICIENCY
AND CONSERVATION, ENHANCING THE EFFICIENT
USE OF ENERGY, AND GRANTING INCENTIVES TO
ENERGY EFFICIENCY AND CONSERVATION
PROJECTS

*Be it enacted by the Senate and House of Representatives of the
Philippines in Congress assembled:*

CHAPTER I

GENERAL PROVISIONS

SECTION 1. *Short Title.* – This Act shall be known
as the “Energy Efficiency and Conservation Act”.

SEC. 2. *Declaration of Policy.* – It is hereby declared
the policy of the State to:

(a) Institutionalize energy efficiency and conservation as
a national way of life geared towards the efficient and
judicious utilization of energy by formulating, developing, and

implementing energy efficiency and conservation plans and programs to secure sufficiency and stability of energy supply in the country to cushion the impact of high prices of imported fuels to local markets and protect the environment in support of the economic and social development goals of the country;

(b) Promote and encourage the development and utilization of efficient renewable energy technologies and systems to ensure optimal use and sustainability of the country's energy resources;

(c) Reinforce related laws and other statutory provisions for a comprehensive approach to energy efficiency, conservation, sufficiency, and sustainability in the country; and

(d) Ensure a market-driven approach to energy efficiency, conservation, sufficiency, and sustainability in the country.

SEC. 3. *Scope.* – This Act shall establish a framework for introducing and institutionalizing fundamental policies on energy efficiency and conservation, including the promotion of efficient and judicious utilization of energy, increase in the utilization of energy efficiency and renewable energy technologies, and the delineation of responsibilities among various government agencies and private entities.

SEC. 4. *Definition of Terms.* – For the purposes of this Act, the following terms shall have the meanings below unless indicated otherwise:

(a) *Certified Energy Conservation Officer (CECO)* refers to a professional who obtains a certification as a CECO after demonstrating high levels of experience, competence, proficiency, and ethical fitness in the energy management profession, and who shall be responsible for the supervision and maintenance of the facilities of Type 1 designated establishments for the proper management of energy consumption and such other functions deemed necessary for the efficient and judicious utilization of energy under this Act;

(b) *Certified Energy Manager (CEM)* refers to a licensed engineer who obtains a certification as a CEM after

demonstrating high levels of experience, competence, proficiency, and ethical fitness in the energy management profession, and who shall be chosen by Type 2 designated establishments to plan, lead, manage, coordinate, monitor, and evaluate the implementation of sustainable energy management within their organizations;

(c) *Designated establishment* refers to a private or public entity in the commercial, industrial, transport, power, agriculture, public works, and other sectors identified by the Department of Energy (DOE) as energy intensive industries based on their annual energy consumption in the previous year or an equivalent annual index; the amount of consumption is indicated in this Act and subject to adjustment by the DOE as it deems necessary;

(d) *Distribution utility* refers to any electric cooperative, private corporation, government-owned utility, or existing local government unit (LGU) which has an exclusive franchise to operate a distribution system including those whose franchise covers economic zones;

(e) *Department of Energy (DOE)* refers to the agency created through Republic Act No. 7638, otherwise known as the "Department of Energy Act of 1992", and whose functions were expanded by Republic Act No. 9136, otherwise known as the "Electric Power Industry Reform Act of 2001";

(f) *Energy* refers to all types of energy available commercially including natural gas (liquid natural gas and liquid oil gas), all heating and cooling fuels (including district heating and district cooling), coal, transport fuels, and renewable energy sources;

(g) *Energy audit* refers to the evaluation of energy consumption and review of current energy cost to determine appropriate intervention measures and efficiency projects in which energy can be judiciously and efficiently used to achieve savings. It may refer to a walk-through audit, a preliminary audit, or a detailed audit;

(h) *Energy auditor* refers to individuals or entities certified by the DOE who have proven credibility and

competence to conduct an energy audit: *Provided*, That the guidelines in the certification of energy auditors shall be developed by the DOE upon consultation with stakeholders;

(i) *Energy conservation* refers to the reduction of losses and wastage in various energy stages from energy production to energy consumption through the adoption of appropriate measures that are technologically feasible, economically sound, environmentally-friendly, and socially affordable;

(j) *Energy Consumption and Conservation Report (ECCR)* refers to the periodic report submitted to the DOE by Type 1 and Type 2 designated establishments, distribution utilities, and the transmission utility with regard to the National Energy Efficiency and Conservation Plan containing, among others, energy consumption, energy loss, and status of energy use: *Provided*, That the comprehensive contents of the report shall be specified by the DOE;

(k) *Energy efficiency* refers to the way of managing and restraining the growth in energy consumption resulting in the delivery of more services for the same energy input or the same services for less energy input;

(l) *Energy Efficiency and Conservation Office (EECO)* refers to the office to be established in each LGU mandated to oversee and monitor the implementation of their respective Local Energy Efficiency and Conservation Plan (LEECP), which may be part of the planning and development office;

(m) *Energy Efficiency and Conservation Officer (EECO Officer)* refers to the head of the EECO responsible for overseeing the implementation of the LEECP at the local government level, who may be designated from the existing personnel of the LGU;

(n) *Energy efficiency projects* refer to projects designed to reduce energy consumption and costs by any improvement, repair, alteration, or betterment of any building or facility, or any equipment, fixture, or furnishing to be added to or used in any building, facility, or vehicle including the manufacturing and provision of services related thereto: *Provided*, That such projects shall be cost-effective and shall

lead to lower energy or utility costs during operation and maintenance;

(o) *Energy end user* refers to all individuals and entities which consume energy to include households, industrial and commercial customers, power plants, distribution utilities, and transmission utilities;

(p) *Energy labeling* refers to the Philippine Energy Standards and Labeling Program (PESLP) which requires manufacturers to attach an energy label on their products to inform consumers about the energy performance and efficiency of the product;

(q) *Energy management* refers to the process of designing and implementing an optimal program of purchasing, generating, and consuming various types of energy based on the end user's overall short-term and long-term management program, with due consideration of factors including costs, availability, economics, and environmental impact;

(r) *Energy Service Company (ESCO)* refers to a juridical entity that offers multi-technology services and goods towards developing and designing energy efficiency projects, delivering and guaranteeing energy savings, and ensuring cost-effective and optimal performance. Their services include 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. Their goods include lighting, motors, drives, heating, ventilation, air conditioning systems, building envelope improvements, and waste heat recovery, cooling, heating, or other usable forms of energy control systems;

(s) *Government energy efficiency projects* refer to energy efficiency projects carried out by all government departments, government-owned and -controlled corporations (GOCCs), state universities and colleges, hospitals, and other instrumentalities of the government which have been evaluated and endorsed by the DOE for approval of the Inter-Agency Energy Efficiency and Conservation Committee (IAEECC) created under this Act;

(t) *Government Energy Management Program (GEMP)* refers to the government-wide program to reduce the government's monthly consumption of electricity and petroleum products through electricity efficiency and conservation, and efficiency and conservation in fuel use of government vehicles, among others;

(u) *Local Energy Efficiency and Conservation Plan (LEECP)* refers to a collaborative and multi-stakeholder comprehensive framework, governance structure, and programs prepared by the LGU for local energy efficiency and conservation with defined targets, feasible strategies, and regular monitoring and evaluation: *Provided, That it shall be aligned with this Act and the NEECP.*

(v) *Local government units (LGUs)* refer to the government units created through Republic Act No. 7160, otherwise known as the "Local Government Code of 1991";

(w) *Minimum Energy Performance (MEP)* refers to a performance standard which prescribes a minimum level of energy performance for the commercial, industrial, and transport sectors, and energy-consuming products including appliances, lighting, electrical equipment, machinery, and transport vehicles that must be met or exceeded before they can be offered for sale or used for residential, commercial, transport, and industrial purposes;

(x) *National Energy Efficiency and Conservation Coordinating Officer (NEECCO)* refers to the person appointed by the Department of the Interior and Local Government (DILG) upon the recommendation of the league of LGUs from among all the EEC Officers of different local governments, who shall be responsible for integrating all the LEECPs;

(y) *National Energy Efficiency and Conservation Database (NEECD)* refers to a centralized, comprehensive, and unified database on national energy consumption, the application and use of energy efficient and renewable energy technologies, and other critical and relevant information to be used for evaluation, analysis, and dissemination of data and information related to energy efficiency and conservation;

(z) *National Energy Efficiency and Conservation Plan (NEECP)* refers to the national comprehensive framework, governance structure, and programs for energy efficiency and conservation with defined national targets, feasible strategies, and regular monitoring and evaluation: *Provided, That it shall be aligned with this Act and shall be a result of a collaborative and multi-stakeholder consultative process: Provided, further, That it shall be regularly reviewed and revised as determined by the DOE;*

(aa) *Philippine Qualifications Framework (PQF)* refers to a national policy describing the levels of educational qualifications and sets of standards for qualification outcomes. It is a quality assured national system for the development, recognition, and award of qualifications based on the standards of knowledge, skills, and values acquired in different ways and methods by learners and workers. It is an assessment-based qualification recognition which is competency-based and labor market driven;

(bb) *Transport vehicle* refers to land, air, or sea vehicles conveying cargo or passengers, regardless of size or weight classification;

(cc) *Specific energy consumption* refers to the energy consumption volume required per unit, such as production volume, sales amount, transportation kilometer, transportation tonne-kilometer, floor space, and such other indicators relevant to energy consumption; and

(dd) *Transmission utility* refers to any private corporation or government-owned utility which has an exclusive franchise to operate the system of wires for the conveyance of electricity through a high voltage backbone line.

CHAPTER II

ROLES AND RESPONSIBILITIES OF AGENCIES

SEC. 5. *Implementing Agency.* – The DOE shall be the lead agency in the implementation of this Act. It shall be responsible for the planning, formulation, development, implementation, enforcement, and monitoring of energy

management policies and other related energy efficiency and conservation plans and programs. In addition to its existing mandate, the DOE shall also have the following powers and functions:

- (a) Spearhead the creation and update the development of the NEECP in coordination with pertinent government agencies, LGUs, and private corporations and organizations;
- (b) Develop a system of monitoring the implementation of the NEECP, including the targets that are established therein;
- (c) Develop and maintain the NEECD, in coordination with and with the assistance of the Philippine Statistical Authority, to ensure efficient evaluation, analysis, and dissemination of data and information for enforcement, planning, and policy-making purposes;
- (d) Lead the efforts to ensure compliance with the GEMP in accordance with the strategic direction provided by the IAEECC;
- (e) Develop, impose, and review the MEP in consultation with the Department of Trade and Industry – Bureau of Philippine Standards, and pursuant to Chapter V, Section 14 of this Act;
- (f) Require manufacturers, importers, and dealers to comply with the MEP, and to display on the packaging and on their products the energy label showing the energy requirement and consumption efficiency of such products;
- (g) Periodically review and reclassify designated establishments as defined under this Act and pursuant to its implementing rules and regulations (IRR);
- (h) Enforce and ensure compliance with prescribed ratings standards for energy performance in buildings and industries, in coordination with pertinent government agencies and LGUs;

(i) Support LGUs on matters related to energy efficiency planning and promotion, the preparation of their respective LEECPs, and its implementation through various local energy efficiency programs: *Provided*, That the DOE shall provide LGUs with templates for reports and updates;

(j) Coordinate with the NEECCO on the integrated LEECP to ensure its consistency and alignment with the NEECP;

(k) Consult with energy end users to develop the appropriate mechanism to effectively implement this Act: *Provided*, That such mechanism shall, as much as practicable, redound to the direct benefit of the energy end user;

(l) Initiate and maintain collaborative efforts with the business sector, particularly the commercial, industrial, transport, and power sectors, to ensure compliance with this Act and broaden and enhance their efficient and judicious utilization of energy;

(m) Develop and undertake a national awareness and advocacy campaign on energy efficiency and conservation in partnership with business, academe, nongovernment organizations, and other sectors;

(n) Provide annual reports to both Houses of Congress, indicating, among others, the status of implementation of this Act at the national and local levels, cost effectiveness outcomes, and energy and environmental impacts, among others;

(o) Impose and collect reasonable fees on accreditation and certification for services provided herein; and

(p) Perform such other powers and functions as may be necessary to attain the objectives of this Act.

SEC. 6. Role of Other Government Agencies. – All government agencies including GOCCs shall ensure the efficient use of energy in their respective offices, facilities, transportation units, and in the discharge of their functions.

In addition, the following agencies shall exercise the responsibilities and functions as enumerated hereunder:

(a) Board of Investments (BOI) – The BOI shall include energy efficiency projects, as defined in this Act, in the annual investment priorities plan entitled to incentives provided under Executive Order No. 226, otherwise known as the “Omnibus Investments Code of 1987”, as amended, and any other applicable laws;

(b) Climate Change Commission (CCC) – The CCC shall collaborate with the DOE and other government agencies in establishing targets, determining strategies, and monitoring and recording all greenhouse gas emission reductions resulting from energy efficiency and conservation projects: *Provided*, That such targets and strategies are aligned with the NEECP;

(c) Commission on Audit (COA) – The COA shall recognize government energy efficiency projects, as defined under this Act, as goods, services, and consultancy services, consistent with government accounting and auditing rules;

(d) Commission on Higher Education (CHED) – The CHED shall integrate into existing engineering curricula appropriate courses related to energy management. It shall also promote energy efficiency measures in higher education institutions including state universities and colleges;

(e) Department of Budget and Management (DBM) – The DBM shall give due preference to funding government energy efficiency projects, as defined under this Act, and incorporate energy efficiency as a factor in evaluating the annual performance of government agencies;

(f) Department of Education (DepEd) – The DepEd shall promote energy efficiency and conservation practices in its curricula;

(g) Department of Finance (DOF) – The DOF shall, in coordination with the DOE and other concerned agencies, draw up appropriate mechanisms to implement the fiscal incentives under this Act;

(h) Department of Environment and Natural Resources (DENR) – The DENR shall, in coordination with the DOE and the DILG, establish guidelines for the accurate characterization of wastes arising from energy-consuming devices, equipment, fixtures, and other relevant items, including the end-of-life vehicles and its component parts: *Provided*, That such guidelines shall include appropriate containment features and management of hazardous wastes, consistent with Republic Act No. 6969, otherwise known as the “Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990”;

(i) Department of the Interior and Local Government (DILG) – The DILG shall, in coordination with the DOE, be responsible in ensuring compliance of all LGUs in implementing the provisions of this Act;

(j) Department of Public Works and Highways (DPWH) – The DPWH shall, in coordination with the DOE, be responsible for ensuring the implementation of the Guidelines on Energy Conserving Design of Buildings and Utility Systems as an integral part of the National Building Code, Roadway Lighting Guidelines, and such other related guidelines as may be issued by the DOE, and in accordance with Republic Act No. 6541, otherwise known as the “National Building Code of the Philippines” and other related laws;

(k) Department of Science and Technology (DOST) – The DOST shall, in coordination with the DOE, be responsible for carrying out strategic research and development programs aimed at facilitating the development of new and alternative energy efficient technologies and the promotion thereof;

(l) Department of Trade and Industry (DTI) – The DTI, through the Bureau of Philippine Standards, shall, in consultation with the DOE, require manufacturers, importers, and dealers to comply with the MEP, and to display the energy label and the energy efficiency label showing the energy requirement and consumption efficiency of such products on the packaging and on the products themselves;

(m) Department of Transportation (DOTr) – The DOTr shall, in coordination with the DOE and the DENR, be

responsible for ensuring compliance of vehicle owners, manufacturers, and importers with the MEP for transport vehicles consistent with the specifications for all types of fuels prescribed under Republic Act No. 8749, otherwise known as the "Philippine Clean Air Act of 1999", and to display the energy consumption label in coordination with the vehicle manufacturers, transport industry associations, public transport groups, and nongovernment organizations. The DOTr shall also assist the DOE in the enforcement of and compliance with measures under this Act and its IRR relative to the energy consumption of the transport sector;

(n) Governance Commission for GOCCs (GCG) – The GCG shall incorporate energy efficiency as a factor in evaluating the performance of GOCCs;

(o) Government Financial Institutions (GFIs) – The GFIs shall set aside lending funds for energy efficiency projects at concessional rates of interest to attract private sector investments. The GFIs shall, in collaboration with the Insurance Commission, ensure the availability of compatible guarantee or insurance products that would mitigate credit risks associated with energy efficiency investments in small and medium-sized enterprises and performance risks related to energy efficiency solutions developed by ESCOs, engineering companies, and other technology providers;

(p) Insurance Commission (IC) – The IC shall, in collaboration with the GFIs, ensure the availability of compatible guarantee products that would mitigate the credit risks associated with energy efficiency investments in small and medium-sized enterprises and performance risks related to the energy efficiency solutions developed by ESCOs, engineering companies, and other technology providers;

(q) National Economic and Development Authority (NEDA) – The NEDA shall recognize the role of energy efficiency and conservation in national development;

(r) National Competitiveness Council (NCC) or its Successor Entity – The NCC or its Successor Entity shall serve as the focal point for private sector involvement in the

implementation of this Act in recognition of the potential of energy efficiency as a tool for improving the competitiveness of businesses in the country;

(s) Philippine Statistics Authority (PSA) – The PSA shall, in coordination with the DOE, institutionalize the household energy consumption survey, the survey of energy consumption of establishments, and other surveys relating to energy supply, demand, efficiency, and conservation, and assist the DOE in the establishment of the NEECD as provided under this Act; and

(t) Technical Education and Skills Development Authority (TESDA) – The TESDA shall, in collaboration with the DOE, CHED, DOST, and other training and service institutions, develop training regulations for the certifications of energy managers and energy efficiency and conservation officers. It shall ensure the promotion of energy efficiency practices and renewable technologies through its Technical-Vocational Education and Training Programs. The TESDA shall implement skills training, assessment, and certification programs for mechanics, technicians, installers, and operators of energy efficient, as well as renewable energy systems.

SEC. 7. Role of LGUs. – The LGUs shall establish their respective EECOs headed by an EEC Officer as defined in Section 4(l) and (m) of this Act. The LGUs through their respective EECOs and planning and development offices, with the assistance of the DOE and in coordination with the DILG, shall develop and implement their respective LEECP and incorporate these in their local development plans.

Furthermore, the LGUs shall assist the DOE in monitoring compliance with the obligations of designated establishments under this Act for input in the NEECD.

SEC. 8. Role of Energy End Users. – All energy end users shall use every available energy resource efficiently and promote the development and utilization of new and alternative energy efficient technologies and systems, including renewable energy technologies and systems across sectors in compliance with the declared policies of this Act.

CHAPTER III

INTER-AGENCY ENERGY EFFICIENCY AND
CONSERVATION COMMITTEE

SEC. 9. *Inter-Agency Energy Efficiency and Conservation Committee.* – An Inter-Agency Energy Efficiency and Conservation Committee (IAEECC) is hereby created to evaluate and approve government energy efficiency projects, as defined under this Act, and to provide strategic direction in the implementation of the GEMP.

The IAEECC shall be composed of the Secretaries of the DOE, DBM, DOF, DTI, DOTr, DOST, DILG, and DPWH, and the Director General of the NEDA. The DOE Secretary shall serve as the IAEECC Chairperson. The Energy Utilization Management Bureau of the DOE shall serve as the IAEECC's Secretariat.

SEC. 10. *Powers and Functions.* – The IAEECC shall have the following powers and functions :

(a) Prepare an annual assessment of opportunities for energy cost reduction in state-owned and leased buildings and facilities designated by the IAEECC: *Provided*, That each assessment shall be completed each year: *Provided, further*, That the assessment shall be made available to the public: *Provided, finally*, That the assessment shall include:

(1) Data for the preceding five (5) years on energy consumption and costs including anticipated energy consumption and cost projected for the next three (3) years for each state-owned and leased building and facility designated by the IAEECC;

(2) Energy conservation measures deployed in state-owned and leased buildings and facilities designated by the IAEECC during the preceding year;

(3) Evaluation studies of the cost reductions and other benefits realized through the deployment of energy conservation measures; and

(4) Energy conservation opportunities based on audits, technical analysis, or other methods of determining such opportunities and associated energy saving operations and maintenance procedures and capital projects for each state-owned and leased building or facility designated by the IAEECC;

(b) Review all proposed capital projects and energy cost operating budgets of agencies designated by the IAEECC and recommend energy conservation measures which would reduce operating costs in state-owned and leased buildings or facilities;

(c) Provide any officer or entity of government, technical and consultative assistance concerning energy cost management or conservation;

(d) Annually recommend specific operations and maintenance procedure modifications and capital projects for state-owned and leased buildings and facilities designed to reduce energy consumption and costs;

(e) Conduct surveys, audits, technical analysis, and other research or investigations related to government energy efficiency projects and the GEMP as may be necessary to support the preparation of the NEECP and the objectives of this Act;

(f) Issue a report describing the status of government energy efficiency projects and the GEMP, listing obstacles to building energy efficiency improvement together with related recommendations for statutory change, and identifying opportunities for public sector energy cost reductions not addressed by this Act or the programs developed pursuant hereto; and

(g) Develop, after study of existing or emerging energy conservation technologies, guidelines as may be necessary or desirable to aid the work of the IAEECC in furtherance of the objectives of this Act.

SEC. 11. *Government Energy Efficiency Projects.* – Government agencies and LGUs are authorized to enter into different financial arrangements for energy efficiency projects

following the procedures laid down in any of the following measures: Republic Act No. 9184, otherwise known as the "Government Procurement Reform Act"; Republic Act No. 6957, otherwise known as "An Act Authorizing the Financing, Construction, Operation and Maintenance of Infrastructure Projects by the Private Sector, and For Other Purposes", as amended by Republic Act No. 7718; Republic Act No. 7160, otherwise known as the "Local Government Code of 1991"; the 2013 NEDA Joint Venture Guidelines, as may be amended in the future; the applicable LGU charter; related laws, rules, regulations; and other modalities.

CHAPTER IV

CERTIFICATION FOR PROFESSIONAL COMPETENCY AND ACCREDITATION FOR PROFESSIONAL SERVICES

SEC. 12. *Certified Energy Conservation Officer and Certified Energy Manager.* – A system for the certification and assessment of energy conservation officers and energy managers shall be established towards raising the professional standards of those engaged in energy management.

The CECO certification system shall be developed by the DOE and the TESDA. It shall be based on an approved scope of practice, a set of competency standards with a clear assessment and certification process, and a certification for the determined competency undertaken by the prescribed governance structure and quality assurance systems and aligned with the PQF and applicable international standards. Towards this end, the TESDA shall conduct training, assessment, and certification of workers for PQF qualification Levels 1 to 5, and shall register Technical-Vocational Education and Training programs including that of nonprofit organizations and other private training institutions. The TESDA shall, in coordination with the DOE, develop guidelines for this purpose.

The CEM certification and assessment system for registered engineers shall be established by the CHED. Towards this end, the CHED shall offer professional certificate programs for energy managers and shall, in coordination with

the DOE and the TESDA, develop undergraduate, graduate, and professional certificate programs on energy management to ensure availability of competencies and skills required to promote and achieve the country's sustainable energy goals. The CHED shall, in coordination with the DOE, develop guidelines for this purpose.

SEC. 13. *Certification of Energy Service Company.* – The DOE shall strengthen the existing ESCO certification system to develop this service sector and to provide the market with a source of technically and financially capable entities that can assist in the delivery of energy efficiency-related projects.

ESCOs applying for certification must demonstrate their technical and managerial competence to design and implement energy efficiency projects, including:

- (a) Energy audits;
- (b) Design engineering;
- (c) Providing or arranging project financing;
- (d) Construction management;
- (e) Operations and maintenance of energy efficient technologies; and
- (f) Verifying energy savings.

CHAPTER V

ENERGY PERFORMANCE STANDARDS AND LABELING REQUIREMENTS

SEC. 14. *Minimum Energy Performance.* – The MEP for the commercial, industrial, and transport sectors shall be developed by the DOE, in consultation with relevant stakeholders, and guided by a cost-benefit analysis which shall be completed by the DOE with the assistance of the NEDA within one (1) year from the effectivity of this Act: *Provided*, That the adoption and enforcement of the MEP shall form part of the NEECP.

The MEP for energy-consuming products through a particular product requirement under the PESLP shall also be developed by the DOE in consultation with relevant stakeholders involved in the manufacturing, sale, and use of the products covered. The DOE shall also develop the energy performance testing guidelines for all energy-consuming products to ensure compliance with the MEP.

All manufacturers, importers, distributors, and retailers of energy-consuming products shall comply with the MEP, subject their energy-consuming products to energy performance testing, and submit their respective product information to the DOE.

No manufacturer, importer, distributor, and retailer shall sell, lease, or import any energy-consuming product, unless the product complies with the MEP and the product or its package is labeled in accordance with this Act.

SEC. 15. *Energy Labeling for Products and Equipment.* – The DOE shall prescribe energy labels for all energy-consuming products, devices, and equipment. Manufacturers, importers, suppliers, distributors, and retailers engaged in selling such products, devices, and equipment shall ensure that such energy labels are displayed accordingly, and shall provide information that shall assist consumers to make informed decisions on such products: *Provided*, That they shall ensure the integrity of the information submitted and made available to the public: *Provided, further*, That the DOE shall define the nature and scope of the information to be provided.

The DOE shall also develop and enforce a mandatory energy efficiency rating and labeling system for identified energy-consuming products, such as room air conditioners, refrigeration units, and television sets, to promote energy efficient appliances and raise public awareness on energy saving. The energy efficiency label shall, at the minimum, reflect the energy efficiency rating of the product, the monthly energy consumption based on a specified hour of daily usage, the brand name and product model, and the year the energy rating was issued: *Provided*, That the calculation method of the energy efficiency rating shall be made available to the public and shall be updated as often as necessary to ensure the integrity of the labeling system: *Provided, further*, That

the calculation of the energy efficiency rating shall be contained in the Code of Practice on Energy Labeling of Products or other related issuance, which shall be updated regularly by the DOE.

SEC. 16. *Energy Product, Device, and Equipment Examination, Testing, and Verification.* – The DOE shall regularly select energy-consuming products and their models for examination, testing, and verification. As such, the DOE may require any manufacturer, importer, supplier, distributor, or retailer of energy-consuming products, devices, and equipment to make available, at such place as the DOE may specify, such number of products as the DOE considers to be reasonably necessary for examination and testing under this section.

The DOE is hereby authorized to dismantle and examine the energy-consuming product, device, or equipment referred herein, to determine the product's energy efficiency. These products shall, upon completion of testing, be returned by the DOE to the concerned manufacturer, importer, supplier, distributor, or retailer, unless the DOE has reasonable grounds to believe that a provision of this Act was violated and the product will serve as evidence of the violation.

The DOE may, subject to procurement laws and regulations, procure the services of or enter into an agreement or other arrangement with a qualified supplier or entity to carry out the examination and testing of energy-consuming products. The DOE shall, in the engagement of a qualified supplier or entity to carry out the examination and testing of energy-consuming products, follow the process and procedures laid down in Republic Act No. 9184, otherwise known as the "Government Procurement Reform Act" and its revised IRR except when the engagement involves a contractual arrangement under a public-private partnership covered by Republic Act No. 6957, otherwise known as the "An Act Authorizing the Financing, Construction, Operation and Maintenance of Infrastructure Projects by the Private Sector, and For Other Purposes", as amended by Republic Act No. 7718, or through a joint venture agreement with private

entities under a profit sharing scheme under the 2013 NEDA Joint Venture Guidelines, as may be amended in the future.

SEC. 17. *Fuel Economy Performance for Transport Vehicles.* – To ensure fuel efficiency for transport, vehicle manufacturers, importers, and dealers shall comply with fuel economy performance labeling requirements set by the DOE with the assistance of the DENR and the DOTr. The vehicle manufacturers, importers, and dealers shall provide technical information on the fuel economy rating of the engine that will allow the consumers to make an informed decision in choosing the vehicles for their use.

The DOE shall develop and conduct fuel efficiency testing guidelines for the conduct of fuel efficiency tests to validate the information provided by vehicle manufacturers, importers, and dealers.

SEC. 18. *Energy Performance for Buildings.* – To ensure appropriate and effective implementation of energy efficiency and conservation for new and existing buildings for commercial and industrial use such as hospitals, educational facilities, exhibition centers, government offices, and military facilities, the LGUs shall implement the following measures in accordance with building permit issuances:

(a) New building construction shall comply with the minimum requirements as specified in the Guidelines on Energy Conserving Design on Buildings issued by the DOE, in consultation with the DPWH, which may be revised to reflect new and emerging energy efficiency and conservation technologies: *Provided*, That state-owned buildings and facilities shall comply with the GEMP and such other guidelines issued by the IAEECC; and

(b) Retrofit of buildings shall also comply with the minimum requirements as specified in the Guidelines on Energy Conserving Design on Buildings issued by the DOE, in consultation with the DPWH, which may be revised to reflect new and emerging energy efficiency and conservation technologies: *Provided*, That state-owned and leased buildings

and facilities shall comply with the GEMP and such other guidelines issued by the IAEECC.

CHAPTER VI

DESIGNATED ESTABLISHMENTS

SEC. 19. *Designated Establishments.* – Designated establishments shall initially be classified as follows:

(a) Type 1 designated establishments are those with an annual energy consumption of 500,000 kilowatt-hours (kWh) to 4,000,000 kWh for the previous year; and

(b) Type 2 designated establishments are those with an annual energy consumption of more than 4,000,000 kWh for the previous year.

The thresholds for determining Type 1 or Type 2 designated establishments shall be periodically reviewed and adjusted, if deemed necessary, by the DOE.

SEC. 20. *Obligations of Designated Establishments.* – The designated establishments shall have the following obligations:

(a) Integrate an energy management system policy into the business operation based on ISO 50001 or any similar framework;

(b) Set up programs to develop and design measures that promote energy efficiency, conservation, and sufficiency that may include installation of renewable energy technologies;

(c) Set up annual targets, plans, and methods of measurements and verification for the implementation of energy efficiency and conservation projects;

(d) Keep records on monthly energy consumption data and other energy-related data;

(e) Improve average specific energy consumption in accordance with the annual reduction targets to be established by the DOE in the NEECP;

(f) Submit an annual ECCR to the DOE by the 15th of April of every year;

(g) Conduct an energy audit once every three (3) years, by engaging either a certified energy auditor or an accredited ESCO and submit an energy audit report to the DOE upon completion of the energy audit;

(h) Employ a CECO for Type 1 designated establishments, and a CEM for Type 2 designated establishments: *Provided*, That the CECO and the CEM may be chosen from within the organization or hired through external recruitment; and

(i) Duly notify the DOE on the appointment or separation from the service of their respective CECOs or CEMs within ten (10) working days from the effectivity of these personnel action.

SEC. 21. *Responsibilities of the CECO and the CEM.* – The CECO and the CEM, in their respective designated establishments, shall:

(a) Manage the energy consumption of facilities, equipment, and devices;

(b) Administer the following:

(1) Implementation and improvement of energy efficiency measures;

(2) Conduct of regular energy audit;

(3) Energy monitoring and control; and

(4) Preparation of periodic energy consumption and energy conservation program reports; and

(c) Fulfill other responsibilities as indicated in this Act.

SEC. 22. *Other Establishments.* – Establishments with an annual energy consumption of at least 100,000 kWh but less than 500,000 kWh in the previous year shall be required

to submit an annual energy consumption report to the DOE and integrate an energy management system policy into their business operations based on ISO 50001 or any similar framework on such other standard identified by the DOE: *Provided*, That the thresholds indicated herein shall be periodically reviewed and adjusted, if deemed necessary, by the DOE. These establishments may, on a voluntary basis, submit themselves to external energy audit or quality control assessment to assist them in their energy planning and management.

SEC. 23. *Visitorial Powers and On-Site Inspections.* – The DOE shall have the authority to visit designated establishments to inspect energy-consuming facilities, evaluate energy management systems and procedures, identify areas for efficiency improvement, and verify energy monitoring records and reports and other documents related to the compliance requirements of this Act within office hours and in the presence of an authorized representative of the designated establishment.

CHAPTER VII

DEMAND SIDE MANAGEMENT

SEC. 24. *Demand Side Management (DSM).* – The DOE, with the assistance of the Energy Regulatory Commission and the Philippine Economic Zone Authority, shall pursue a DSM program for the electric power industry for the reduction of energy consumption through effective load management resulting to the decrease of power demand and the migration of power demand from peak to off-peak periods or such measures undertaken by distribution utilities to encourage end users to properly manage their loads to achieve efficiency in the utilization of fixed infrastructures in the systems.

CHAPTER VIII

INCENTIVES

SEC. 25. *Fiscal Incentives.* – Upon certification by the DOE, energy efficiency projects, as defined in this Act, shall be included in the annual investment priorities plan of the

BOI and shall be entitled to the incentives provided under Executive Order No. 226, otherwise known as the "Omnibus Investments Code of 1987", as amended, and any other applicable laws for ten (10) years from the effectivity of this Act: *Provided*, That after the aforementioned period, the inclusion of energy efficiency projects in the annual investment priorities plan shall be reviewed and may be extended by the BOI: *Provided, further*, That energy efficiency projects shall be exempt from Article 32(1) of Executive Order No. 226.

SEC. 26. *Non-Fiscal Incentives.* – Establishments that will implement or are implementing energy efficiency projects shall be entitled to the following:

(a) Provision of awards and recognition for innovations in energy efficiency and conservation best practices, and successful energy efficiency projects and energy efficient products; and

(b) Provision of technical assistance from government agencies in the development and promotion of energy efficient technologies.

SEC. 27. *Financial Assistance.* – GFIs and other financial institutions shall, in accordance with and to the extent allowed by the enabling provisions of their respective charters or applicable laws, provide concessional financial packages for the development, utilization, and commercialization of renewable energy and energy efficiency projects as duly recommended and endorsed by the DOE.

CHAPTER IX

MISCELLANEOUS PROVISIONS

SEC. 28. *Waste Management Collection, Recycling and Disposal Guidelines.* – The DENR, in coordination with the DOE and the DILG, will establish guidelines for the accurate characterization of wastes arising from energy-consuming devices, equipment, fixtures, and other relevant items, including end-of-life vehicles and their component parts. These guidelines shall include appropriate containment features and

management measures for hazardous wastes, consistent with Republic Act No. 6969, otherwise known as the "Toxic Substance and Hazardous and Nuclear Wastes Control Act of 1990".

A Waste Management Collection, Recycling and Disposal Strategy (WMCRRS) shall also be developed by the DOE, the DENR, and the DILG for wastes covered by this Act to ensure that these are managed and disposed properly to prevent impacts on the environment: *Provided*, That the WMCRRS shall include waste recovery and recycling of components of devices, equipment, fixtures, and other relevant items: *Provided, further*, That the WMCRRS shall be submitted to the National Solid Waste Management Commission in accordance with Republic Act No. 9003, otherwise known as the "Ecological Solid Waste Management Act of 2000" for coordination with pertinent government agencies and units for implementation.

SEC. 29. *Strengthening of the Energy Utilization Management Bureau.* – The Energy Utilization Management Bureau (EUMB) under the DOE is hereby reorganized as follows:

(a) Alternative Fuels and Energy Technology Division whose functions shall include:

(1) Formulating policies, plans, and programs related to alternative fuels and new and advanced energy technologies' development towards socially and environmentally responsive and effective utilization of energy resources; and

(2) Developing and managing the alternative fuels and energy technology program;

(b) Energy Efficiency and Conservation Program Management and Technology Promotion Division whose functions shall include:

(1) Evaluating energy efficiency and conservation technologies;

(2) Promoting the increased utilization of energy efficient products;

(3) Preparing all reports for submission to other government agencies as required by law; and

(4) Developing a comprehensive information, education, and communication strategy for public awareness on energy efficiency programs and energy efficient products;

(c) Energy Efficiency and Conservation Public Sector Management Division whose functions shall include:

(1) Coordinating with the LGUs and the NEECCO to ensure consistency with the NEECP;

(2) Providing technical assistance to LGUs and other government agencies;

(3) Enhancing, expanding, and developing the GEMP; and

(4) Providing technical support to the IAEECC and acting as its Secretariat;

(d) Energy Efficiency and Conservation Performance Regulation and Enforcement Division whose functions shall include:

(1) Spearheading the creation of the NEECD in accordance with the provisions of this Act;

(2) Formulating, developing, and updating the MEP, energy labeling, and other programs indicated herein; and

(3) Enforcing the programs under this Act and its IRR, such as the MEP and energy labeling.

The Appliance Testing and Laboratory Division of the Energy Research and Testing Laboratory Services, the Legal Services under the General Legal Services Division, the Financial Services under the Accounting Division, and each field office under their respective Energy Resources Development and Utilization Divisions of the DOE shall hereby

receive additional plantilla positions to provide support service to the EUMB in the discharge of its functions under this Act.

The Secretary of DOE shall submit the revised organizational structure and staffing complement of the reorganized EUMB which shall be effective upon the approval of the Department of Budget and Management.

SEC. 30. *Prohibited Acts.* – The following acts are prohibited:

(a) Failing to comply with energy labeling;

(b) Removing, defacing, or altering any energy label on the energy-consuming product before the product is sold to the first retail purchaser or leased to the first lessee;

(c) Failing to provide accurate information or the provision of false or misleading energy information as required to be submitted under this Act;

(d) Selling, leasing, or importing energy-consuming products that do not comply with the MEP;

(e) Failing or willfully refusing to appoint or designate a CECO or CEM;

(f) Willfully refusing to submit to an on-site inspection as indicated in Section 23 of this Act;

(g) Failing or willfully refusing to submit any of the reports required herein;

(h) Failing to comply with issued orders of the DOE in the discharge of its enforcement powers; and

(i) Violating any provision of the IRR, codes, and guidelines issued in accordance with this Act.

SEC. 31. *Explanation, Recommendation, Disclosure and Order.* – Upon determination that a reasonable ground exists that an establishment has committed any of the prohibited acts under Section 30 of this Act, the DOE may consider the

following measures prior to the imposition of the appropriate fines and penalties for such violations:

(a) Require an explanation supported by reports, returns, and other documents to rebut the alleged commission of the prohibited act;

(b) In cases where an explanation has been issued but the DOE finds a violation because of materially insufficient reports, false returns, and nonsubmission of required documents, provide a recommendation to the said establishment;

(c) Disclose the name of the establishment after it has received a recommendation and failed to comply with such recommendation; and

(d) Issue an order in cases where the said establishment fails to follow or comply with the recommendation of the DOE: *Provided*, That failure on the part of the establishment to comply with the order shall be a valid ground for the imposition of fines and/or penalties in accordance with Section 32 of this Act.

SEC. 32. *Fines and Penalties.* – The DOE is empowered to impose fines and penalties for any violation of the provisions of this Act, its IRR and other related issuances. The fines and penalties shall range from a minimum of Ten thousand pesos (P10,000.00) to a maximum of One million pesos (P1,000,000.00): *Provided*, That this is without prejudice to the penalties provided for under existing regulations prescribed by any other concerned government agency: *Provided, further*, That this is without prejudice to criminal liability as stated in this Act.

SEC. 33. *Criminal Liability.* – The responsible officers and employees of any establishment or organization who willfully commits any of the prohibited acts under Section 30 of this Act shall, upon conviction, suffer the penalty of imprisonment of one (1) year to five (5) years, or a fine ranging from a minimum of One hundred thousand pesos (P100,000.00) to One hundred million pesos (P100,000,000.00)

or twice the amount of costs avoided for noncompliance, whichever is higher, or both, upon the discretion of the court.

Any person who willfully aids or abets the commission of the prohibited acts under Section 30 of this Act, or who causes the commission of such acts by another, shall be liable in the same manner as the principal.

In cases of association, partnership or corporation, the penalty shall be imposed on the partner, president, chief operating officer, chief executive officer, director, or officer responsible for the violation.

CHAPTER X

FINAL PROVISIONS

SEC. 34. *Appropriations.* – Such sums as may be necessary for the successful implementation of this Act shall be taken from the current appropriations of the DOE. Thereafter, the amount needed for its continuous implementation shall be included in the annual General Appropriations Act.

SEC. 35. *Implementing Rules and Regulations (IRR).* – The DOE shall, in consultation with concerned government agencies and entities, LGUs, commercial, industrial, and transport sectors, and other relevant stakeholders, promulgate the IRR within six (6) months from the effectivity of this Act.

SEC. 36. *Codes of Guidelines.* – The DOE shall, in accordance with the provisions of this Act, develop all codes and guidelines mentioned herein within six (6) months from the promulgation of this Act's IRR.

SEC. 37. *Congressional Oversight.* – Upon the effectivity of this Act, the Joint Congressional Power Commission created under Section 62 of Republic Act No. 9136, otherwise known as the "Electric Power Industry Reform Act of 2001" shall be renamed to Joint Congressional Energy Commission and shall exercise oversight powers over the implementation of this Act.

SEC. 38. *Separability Clause.* – If, for any reason, any section or provision of this Act is declared to be unconstitutional or invalid, such part not affected thereby shall remain in full force and effect.

SEC. 39. *Repealing Clause.* – All laws, presidential decrees, executive orders, issuances, rules, and regulations, inconsistent with the provisions of this Act are hereby repealed or modified accordingly.

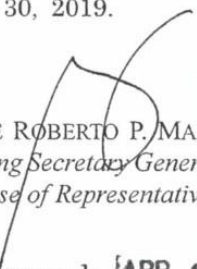
SEC. 40. *Effectivity.* – This Act shall take effect fifteen (15) days after its publication in at least two (2) newspapers of general circulation.

Approved,


GLORIA MACAPAGAL-ARROYO
*Speaker of the House
of Representatives*


VICENTE C. SOTTO III
President of the Senate

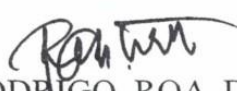
This Act which is a consolidation of Senate Bill No. 1531 and House Bill No. 8629 was passed by the Senate of the Philippines and the House of Representatives on January 30, 2019.


DANTE ROBERTO P. MALING
*Acting Secretary General
House of Representatives*


MYRA MARIE D. VILLARICA
Secretary of the Senate

Approved: APR 12 2019




RODRIGO ROA DUTERTE
President of the Philippines



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