

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

SIXTEENTH CONGRESS
First Regular Session

House Bill No. **4393**



Introduced by HON. REYNALDO V. UMALI

EXPLANATORY NOTE

It is the declared policy of the State to encourage the efficient use of energy and other modalities of demand side management. The Department of Energy (DOE) is mandated to provide adequate, reliable and affordable energy to industries and ordinary citizens to enable them to enjoy a decent life and engage in successful businesses. To this end, it is important to ensure that energy is produced and used in a manner that will promote sustainable development in order to achieve government's goal of spurring economic activity and growth.

Thus, with the demand for energy growing at a fast-paced rate, the government must promote the judicious conservation and efficient utilization of energy resources and, at the same time, minimizing negative environmental impact. This can be done by managing domestic energy consumption.

Recent DOE energy saving forecast projection (2010-2030) shows that there is an annual energy saving potential of 3,445 kilotons of oil equivalent (KTOE) coming from the energy demand sector comprising of households, industrial, commercial, transport and agriculture sectors. This is estimated to have a monetary equivalent value of about PhP 122 million per year.

Furthermore, the benefit to the environment in terms of CO₂ reduction is substantial at an estimated level of 8.9 million tons per year, which directly translates to the reduction of stress to the environment and to the planet as a whole and has a beneficial effect on the survival and quality of life of the global population.

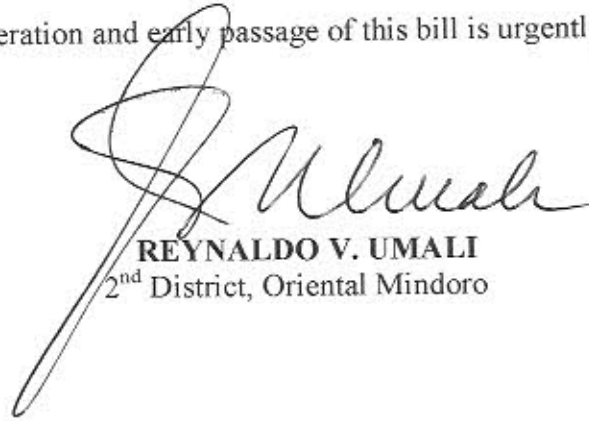
Hence, it should be the goal of government to directly and aggressively promote energy efficiency and conservation by making it a way of life. This demand-side approach contributes to the national economy and preserves the environment as well, through reduction of harmful emissions.

In conjunction with this demand-side management, the use of renewable energy technologies and systems by individual households and industries should also be accelerated. This is another effective response to the country's energy security concerns because this will result in the rationalization of the country's demand for petroleum products and the lessening of the impact of escalating prices to the nation's economy towards energy sufficiency.

It is for this purpose that this bill on Sustainable Energy Efficiency and Conservation is being proposed.

While executive orders and issuances have been issued in the past to implement this policy, the apparent lack of an overall framework has precluded the crafting of comprehensive national energy efficiency, conservation and sufficiency programs. It is high time to institutionalize such a program through legislation.

In view of the foregoing, the deliberation and early passage of this bill is urgently sought.



REYNALDO V. UMALI
2nd District, Oriental Mindoro

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Introduced by HON. REYNALDO V. UMALI

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

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

CHAPTER I

GENERAL PROVISIONS

SEC. 1. Short Title. - This Act shall be known as the "Sustainable Energy Efficiency and Conservation Act of 2014."

SEC. 2. Policy Declaration. - 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 stability and sufficiency of energy supply in the country to cushion the impact of the high price of imported fuels to local markets and protect the environment in support to 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, and sufficiency in the country.

SEC. 3. Role of Energy Users. - All Energy users shall exert efforts to use every available energy resources judiciously, efficiently and promote the development and utilization of renewable energy technologies and systems across sectors from the household level to industries in compliance with the fundamental policies of this Act.

SEC. 4. 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 renewable energy technologies and the definition of responsibilities of various government agencies and private entities.

SEC. 5. Definition of Terms. - For purposes of this Act, the following terms shall, unless the context indicates otherwise, have the following meanings:

(a) ***Certified Energy Manager (CEM)*** refers to a Professional who becomes eligible for this certification after demonstrating expertise in several areas ranging from standards for energy-consuming appliances, equipment, products, vehicles and systems; air quality; energy audits; procurement and financing. It recognizes individuals who have demonstrated high levels of experience, competence, proficiency and ethical fitness in the energy management profession. Type 2 Designated Establishments shall appoint a CEM who shall be responsible for management of energy consumption of its facility or facilities.

(b) ***Demand Side Management*** refers to measures undertaken by distribution utilities to encourage end-users in the proper management of their load to achieve efficiency in the utilization of fixed infrastructures in the systems;

(c) ***Designated Establishment (Type 1/Type 2 Designated Establishment)*** refers to private entity in industrial, commercial, transport and power sectors consuming energy and/or having other index equivalent to such energy for the previous year beyond the level specified by the Department of Energy (DOE). Such establishments shall be categorized as Type 1 or Type 2 Designated Establishment, according to the annual energy consumption [Type 1: 2'1,000,000 but <2,000,000 Liters of Oil Equivalent (LOE), Type 2: 2'2,000,000 Liters of Oil Equivalent (LOE)];

(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 the system of wires extending between the delivery points of the transmission system and the customer point of connection. A distribution utility shall have the obligation to provide distribution services to any end-user within its franchise area;

(e) ***Energy Audit*** refers to the evaluation of energy consumption and review of current energy cost, to determine ways in which energy can be conserved to achieve savings. The three types of energy audit are walk-through audit, preliminary audit and detailed audit;

(f) ***Energy Conservation*** refers to reducing the loss and waste in various energy stages from energy production to energy consumption and using energy more efficiently and rationally through application of appropriate energy management system and adopting measures which are technologically feasible, economically sound and environmentally and socially affordable;

(g) ***Energy Conservation Officer (ECO)*** refers to a person appointed by Type 1 Designated Establishments responsible for the supervision and maintenance of facilities for the proper management of energy consumption and such other functions deemed necessary for the efficient and judicious utilization of energy prescribed under this Act;

(h) ***Energy Efficiency*** refers to the efficient utilization of energy in its various forms through cost-effective options towards the use of less energy for the same or higher performance than regular products or energy systems,

(i) ***Energy Management*** refers to the process of managing energy consumption to ensure that energy has been efficiently consumed;

(j) ***Energy Using Entities*** refers to all energy demand sectors such as commercial, industrial, transport, agricultural, household, government buildings and the power generation, transmission and distribution industry sectors,

(k) **Energy Conservation Report** refers to the periodic report submitted to the DOE by Type 2 Designated Establishments and Transmission Utility with regard to the EE&C plan. The items to be reported in the Energy Conservation Report shall be specified by the DOE;

(l) **Energy Consumption Report** refers to the periodic report submitted to the DOE by Type 1 or Type 2 Designated Establishments and Transmission Utility with regard to the energy consumption and energy loss and other status of energy use. The items to be reported in the Energy Consumption Report shall be specified by the DOE;

(m) **Energy Sufficiency** refers to a condition where the quantity of the supply of energy needed or required is enough or sufficient to meet demand.

(n) **National Sustainable Energy Efficiency and Conservation Coordinating Officer** refers to the person appointed by the Leagues of the local government units from among the local government's Energy Efficiency Conservation and Sufficiency Officer who shall be responsible for integrating local energy efficiency, conservation and sufficiency programs.

(o) **Office of Sustainable Energy Efficiency and Conservation (OSEEC)** refers to the office to be established in local government units headed by the Energy Efficiency Conservation and Sufficiency Officer responsible for overseeing the implementation of the program at the local government level.

(p) **Specific Energy Consumption (SEC)** refers to the energy consumption volume required per unit, such as production volume, sales amount, transportation ton-km, transportation km, floor space and such other indicators relevant to energy consumption;

(q) **System Loss** refers to the difference between the electric energy purchased and generated and the electric energy sold by a Distribution Utility. For purposes of this Act, the term System Loss shall consist of the following components: Technical System Loss, referring to the loss inherent in the physical delivery of electric energy, including conductor loss, transformer core loss and technical errors in meters; Non-Technical Loss, referring to energy loss not related to the physical characteristics of the electrical system, including those attributable to pilferage, tampering of meters and erroneous meter reading; and Administrative Loss, referring to the energy required for the operation of the distribution system and any un-billed energy for community-related activities;

(r) **Transmission Utility** refers to any private corporation or government-owned utility, which has an exclusive franchise to operate the system of wires extending from power generating units to the delivery points through the grid. A transmission utility shall have the obligation to provide distribution services to any end-user within its franchise area; and

(s) **Waste Heat Recovery** refers to the extraction of heat from fluids (i.e., gases or liquids) produced in a thermodynamic or separation process, that would otherwise be vented to the atmosphere, reinjected to the ground or disposed of by other means, for power generation or other applications.

CHAPTER 2

TYPE 1 AND TYPE 2 DESIGNATED ESTABLISHMENTS

SEC. 6. Type 1 Designated Establishments. Establishments with an annual energy consumption equal to or more than 1,000,000 Liters of Oil Equivalent (LOE) but less than 2,000,000 LOE are hereby categorized as Type 1 Designated Establishment and shall include the following sectors:

- a) Building Sector
 - 1) Commercial Building
 - 2) Hotel
 - 3) Hospital Building
 - 4) Educational Institutions
 - 5) Office Building
- b) Industrial/Manufacturing (Medium size industrial/manufacturing plant)
 - 1) Food and Beverages
 - 2) Plastic
 - 3) Metal Fabrication
 - 4) Chemical
 - 5) Appliance
- c) Transport Sector (Fleet)
 - 1) Railway
 - 2) Road Transport
 - 3) Sea Freight and Passenger Vessel
 - 4) Air Transport Cargo and Passenger Vessel
- d) Power Sector
 - 1) Power Generation
 - 2) Distribution Utilities

SEC. 7. Obligations of Type 1 Designated Establishments. - Type I Designated Establishment shall have the following obligations:

a) Employ an Energy Conservation Officer (ECO) and duly notify the Department of Energy (DOE), said ECO's appointment or separation as soon as possible. The ECO shall manage the energy consumption of facilities, equipment and devices, the improvement and implementation of energy efficiency measures, the conduct of regular energy audit, energy monitoring and control and the preparation of periodic energy consumption report;

b) Keep records of monthly energy consumption data and other energy-related data;

c) Set up annual targets and plans for the implementation of energy efficiency and conservation projects or measures. Submit a *Semi-Annual Energy Consumption Report* to the DOE, not later than the 30th day of June and December;

d) Conduct, through competent energy auditors certified by bodies accredited by the DOE, or DOE-accredited energy service company or service provider, the periodic Energy Audit once every three (3) years and submit an Energy Audit Report to the DOE upon completion of the energy audit.

e) Improve average Specific Energy Consumption (SEC) by at least one percent (1 %) year on year.

f) Set up programs to develop and design measures that promote energy efficiency, conservation and sufficiency through installation of renewable energy technologies.

SEC. 8. Type 2 Designated Establishments. - Energy intensive establishments with an annual energy consumption equal to or more than 2,000,000 Liters of Oil Equivalent (LOE) are hereby categorized as Type 2 Designated Establishment and shall include the following sectors:

- a) Building Sector
 - 1) Commercial

- 2) Hotel
- 3) Hospital
- 4) Educational Institutions
- 5) Office
- b) Industrial/Manufacturing sectors
 - 1) Cement
 - 2) Mining
 - 3) Food and Beverages
 - 4) Electronic/Semi-Conductor
 - 5) Steel & Metal
 - 6) Chemical
 - 7) Vehicle
 - 8) Appliance
 - 9) Glass
 - 10) Plastic
 - 11) Others
- c) Transport Sector (Fleet)
 - 1) Railway
 - 2) Road Transport Fleet
 - 3) Sea Freight and Passenger Vessel
 - 4) Air Transport Cargo and Passenger Vessel
- d) Power Sector
 - 1) Power Generating Plants
 - 2) Distribution and Transmission Utilities

SEC. 9. Obligations of Type 2 Designated Establishments - Type 2 Designated Establishments shall have the following obligations:

- a) Employ one (1) Certified Energy Manager (CEM), subject to the provisions of Section 11 of this Act, and duly notify the Department of Energy (DOE) said CEM's appointment or separation as soon as possible. The CEM shall manage the energy consumption of facilities, equipment and devices, the improvement and implementation of energy efficiency measures, the conduct of regular energy audit, energy monitoring and control, and the preparation of periodic energy consumption and energy conservation program reports of the establishment;
- b) Keep records on monthly energy consumption data and other energy-related data,
- c) Set up annual targets and plans for the implementation of energy efficiency and conservation projects;
- d) Submit a *Semi-Annual Energy Consumption Report* and an *Annual Energy Conservation Program Report* to the DOE not later than the 30th day of June and December;
- e) Conduct, through competent energy auditor certified by bodies accredited by the DOE or DOE-accredited energy service company or energy provider, periodic Energy Audit once every three (3) years and submit Energy Audit Report to the DOE upon completion of the energy audit.
- f) Improve average Specific Energy Consumption (SEC) by at least one percent (1%) year on year.
- g) Set up programs to develop and design measures that promote energy efficiency, conservation and sufficiency through installation of renewable energy technologies.

CHAPTER 3

PROMOTION AND ENCOURAGEMENT OF UTILIZATION OF RENEWABLE ENERGY TECHNOLOGIES AND SYSTEMS BY INDIVIDUAL HOUSEHOLD USERS AND INDUSTRIES FOR ENERGY SUSTAINABILITY

SEC. 10. Renewable Energy Technologies and Resources. – The efficient management of domestic energy consumption at the household level through the use of renewable energy technologies and systems shall be actively promoted and encouraged with a view towards accelerating the development and utilization thereof and increasing renewable energy capacity nationwide whereby the sustainability of resources is secured. The Department of Science and Technology (DOST) shall conduct research and development initiatives for this purpose.

SEC. 11. Mechanism for Grant of Subsidies. - The Department of Finance and concerned agencies shall draw-up appropriate mechanism for the grant of subsidies and/or tax credit equivalent to one hundred percent (100%) of the customs duties and national internal revenue taxes on the machinery and equipment whether for individual household use or shall be given to the individual household user and industries who purchase and install said machinery and equipment.

CHAPTER 4

ROLE OF THE DEPARTMENT OF ENERGY

SEC. 12. Responsibilities of the DOE and appropriate agencies. - The DOE shall be the primary government agency responsible for the planning, formulation and development of energy management policies and other related sustainable energy efficiency and conservation plans and programs. The DOE shall consult and coordinate with other government agencies, local government units and the private sector or create an inter-agency committee, as may be deemed necessary, for the effective implementation of sustainable energy efficiency and conservation policies of the government. It shall also promote collaborative efforts with the business sector, particularly the commercial, industrial, transport and power sectors, to broaden and enhance their efficient and judicious utilization of energy. The DOE shall, in consultation with the DTI-BPS, require manufacturers, importers and dealers to comply with the Minimum Energy Performance Standards (MEPS) and to display the Energy Label showing the energy requirement and consumption efficiency of products on their packaging, and on the products themselves, among them designated machinery and equipment, appliances, vehicles and other fuel-using combustion equipment and electric devices.

CHAPTER 5

ROLE OF LOCAL GOVERNMENT UNITS AND LEAGUES OF LOCAL GOVERNMENT UNITS AND ELECTIVE OFFICIALS

SEC. 13. Support and Coordination of Local Government Units and Leagues of Local Government Units and Elective Officials. – In support of the government's sustainable energy efficiency and conservation program, local government units shall establish an Office of Sustainable Energy Efficiency and Conservation (OSEEC) to be headed by the Sustainable Energy Efficiency and Conservation Officer, which shall be responsible for overseeing the implementation of the program at the local government level. The Leagues of Local Government Units and Elective Officials shall appoint a National Sustainable Energy Efficiency and Conservation Coordinating Officer from among the local government units' Sustainable Energy Efficiency and Conservation Officers in the country, who shall integrate local sustainable energy efficiency and conservation programs.

CHAPTER 6

CERTIFICATION FOR PROFESSIONAL COMPETENCY AND ACCREDITATION FOR PROFESSIONAL SERVICES

SEC. 14. Certified Energy Manager (CEM) and Energy Conservation Officer (ECO). - The Commission on Higher Education (CHED) and State Universities and Colleges (SUCs) shall formulate and develop appropriate training course modules for Energy Manager and Energy Conservation Officer under a Certificate Course Program for inclusion in the school curricula.

Similarly, competent Non-Profit Organizations and other private training institutions duly accredited by the DOE and CHED shall offer professional certificate programs for Energy Manager and Energy Conservation Officer.

SEC. 15. Accreditation of Energy Service Company (ESCO) and other Energy Efficiency Service Provider (EESP). - The Department of Energy shall promote and implement an Energy Service Company (ESCO) Accreditation System as an important component for market development measures and for the following purposes:

- a) development of professional and qualified ESCOs and energy engineers;
- b) enhance the capabilities of ESC Os, particularly in their energy auditing services;
- c) enhance support services procurement and selection procedures,
- d) enhance support to public sector incentive schemes in the promotion of energy efficiency; and
- e) reduce energy wastage and eliminate false claims on energy efficiency among industry players.

The development of this sector shall expand the general service sector and stimulates economic development through enhancing cost competitiveness while at the same time strengthening Philippine energy security. The accreditation process of this energy service sector is a natural segment of the knowledge economy, providing sustainable environmental and energy-saving benefits.

CHAPTER 7

INCENTIVES FOR ENERGY EFFICIENCY AND CONSERVATION PROJECTS

SEC. 16. Incentives for Energy Efficiency and Conservation Projects. The DOE shall endorse projects that utilize pioneering energy efficient technologies to the Board of Investments (BOI) to avail of incentives for a period of five years (5) upon the effectivity of this Act. Such incentives shall include (a) tax and duty free importation of pioneering energy efficient technologies; or (b) income tax holiday.

CHAPTER 8

MISCELLANEOUS PROVISIONS

SEC. 17. Recommendation, Disclosure, and Order. - Upon determination that an establishment has committed any of the prohibited acts under Section 16 of this Act, the DOE may consider the following measures prior to the imposition of the appropriate sanctions/penalties for such violations:

- (a) Provide citations in cases where the DOE finds materially insufficient reports, false returns, and non-submission of notifications or reports;

(b) Disclose the name of the establishment in cases where the establishment that has received a citation under the preceding paragraph, failed to remedy such citation by the DOE; and

(c) Issue an Order to the establishment to take measures in cases where the said establishment failed to follow or comply with the citation or recommendations issued by the DOE. Failure on the part of the establishment to comply with such order shall be ground for imposition of penalties in accordance with Section 17 of this Act.

SEC. 18. On-site Inspections. - For the effective enforcement of this Act, the DOE shall have the right to visit Designated Establishments to inspect energy-consuming facilities, evaluate energy management procedures, identify areas for efficiency improvement, and verify energy monitoring reports and other documents related to the compliance requirements of this Act.

CHAPTER 9

FINAL PROVISIONS

SEC 19. Prohibited Acts. - The following acts shall be prohibited:

- a) Failure and/or willful refusal to submit periodic reportorial compliance reports to the DOE;
- b) Failure and/or willful refusal to appoint/designate an Energy Conservation Officer and Certified Energy Manager;
- c) Failure to comply with the Order under Section 15 hereof, and
- d) Willful refusal to submit energy audit report.

SEC 20. Penalties. - Any person who willfully commits any of the prohibited acts enumerated under this Act shall, upon conviction, be liable for penalties that will be defined in the Implementing Rules and Regulations of this Act.

SEC 21. Contingency Powers. - Upon the recommendation of the Secretary of Energy, in times of critical energy supply disruptions or imminent danger thereof, the President may direct the adoption of stringent energy conservation measures, including but not limited to power/fuel allocations or rationing; limiting the operating hours of commercial, industrial and similar establishments; restricting the use of government and private motor vehicles; staggering or limiting working hours in both public and private sectors; and the temporary closure of all energy intensive industries.

SEC. 22. Appropriations. - Such sums as may be necessary for the implementation of this Act shall be taken from the current fiscal year appropriation of the Department of Energy and the Department of Science and Technology and from such other funds that may be made available. Thereafter, the amount needed for the implementation of the act shall be included in the annual general appropriation.

SEC 23. Implementing Rules and Regulations. - The DOE shall, in consultation with concerned government agencies and/or entities, local government units, the energy, industrial and commercial sectors, and other relevant stakeholders, promulgate Implementing Rules and Regulations (IRR) of the Act within six (6) months from the effectivity of this Act.

SEC 24. Separability Clause. -If for any reason, any section or provision of this Act is declared unconstitutional or invalid, such parts not affected thereby shall remain in full force and effect.

SEC. 25. 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. 26. Effectivity. - This Act shall take effect fifteen (15) days after its publication in at least two (2) newspapers of general circulation following its approval.

Approved,