

# IMPLEMENTING RULES AND REGULATIONS DIRECTING THE INSTITUTIONALIZATION OF A GOVERNMENT ENERGY MANAGEMENT PROGRAM (GEMP)

*Pursuant to Section 1.3 (c) of Administrative Order (AO) No. 110 as amended and pursuant to the policy objectives behind Administrative Order Nos. 103 (s. 2004) and 126 (s. 2005) aimed to address the increasing world oil prices through the adherence to the government's energy conservation program, the following rules and regulations are hereby adopted and promulgated:*

## RULE I GENERAL PROVISION

**Section 1. Title** - These Rules shall be known as the Implementing Rules and Regulations (IRR) for Directing the Institutionalization of a Government Energy Management Program (GEMP).

**Section 2. Purpose.** - These Rules shall provide guidelines on the operationalization and the institutionalization of the GEMP in the Philippines in accordance with AO Nos. 103, 110, 110-A and 126.

**Section 3. Scope.** - This IRR shall cover the roles and responsibilities of the Department of Energy (DOE), the Department of Budget and Management (DBM), the Department of Public Works and Highways (DPWH), the National Housing Authority (NHA), the Department of the Interior and Local Government (DILG), the Department of Trade and Industry (DTI), the Department of Education (DepEd), the Philippine Information Agency-Office of the Press Secretary (PIA-OPS), the Department of Environment and Natural Resources (DENR) and all government entities in implementing the GEMP.

## RULE II DEFINITION OF TERMS

**Section 1. Definitions** - The following terms as used in this IRR shall be defined as follows:

**"Agency Rating"** refers to the over-all rating posted in the government entity's premises showing the result of the Spot Check conducted by the Energy Audit Team (EAT) following its established rating scheme.

**"Alternative Fuel"** refers to biodiesel, bioethanol, natural gas, battery/cell, hydrogen and automotive LPG, instead of pure gasoline, diesel and kerosene.

**"Energy Audit Team"** or "EAT" refers to the group tasked to implement Administrative Order No. 103 (s.2004), Administrative Order No. 110 (s. 2004), Administrative Order No. 110-A (s. 2006), and Administrative Order No. 126 (s. 2005).

**"Energy Conservation Officer"** or "ECO" refers to a Senior Official who is officially designated by Head of Agency concerned to ensure the agency's compliance with the provisions of Administrative Order No. 103 (s. 2004), Administrative Order No. 110 (s.2004), Administrative Order 126 (s.2005) and this IRR, as well as the development and implementation of other energy conservation measures.



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**“Energy Survey/Audit”** is defined as the verification, monitoring and analysis of the use of energy, including preparation of a technical report containing recommendations for improving energy efficiency with cost-benefit analysis and an action plan to reduce energy consumption to be provided to the agency requesting audit.

**“Government entity”** refers to all departments, bureaus, agencies and instrumentalities of the Philippine Government, including Government-Owned and/or Controlled Corporations (GOCCs) and other government corporate entities (OGCEs) and their subsidiaries, Government Financial Institutions (GFIs), as well as state universities and colleges (SUCs).

**“Government facility”** means any building or cluster of buildings, grounds, or structure, as well as any fixture or parts thereof, including the associated energy consuming support systems, which is constructed, renovated or purchased in whole or in part for use by the Philippine Government. It shall also include any building rented/leased in whole or in part for use by the Philippine Government.

**“Government vehicle”** refers to any motor vehicle owned or registered in the name of a government entity.

**“Minimum Energy Performance Specification (MEPS)”** refers to the minimum energy performance specification set by the Department of Trade and Industry-Bureau of Product Standards (DTI-BPS) for specific lighting products.

**“Spot Check”** is the conduct of an unannounced inspection of any government entity or facility for the purpose of, but not limited to, checking, monitoring and evaluating the energy consumption to verify if the energy conservation and efficiency programs are being implemented.

### **RULE III ENERGY CONSERVATION PROGRAMS**

**Section 1. Formulation of Energy Conservation Programs.** In accordance with the policy of the government to promote the judicious and efficient utilization of energy resources, an Energy Conservation Program (ECP) shall be formulated by each government entity to include energy conservation measures, target savings, motor vehicle inventory and other strategies. In the development of the ECP, the following strategies must be adopted:

- 1) Aggressive promotion of energy conservation and energy efficient technology through the conduct of appropriate information, education and communication campaign, energy audits / surveys, and spot checks without prejudice to the employees/officials’ productivity and performance;
- 2) Purchase and use of appliances and equipment to be selected only from the list of DOE-certified efficient products as posted in the DOE website and as may be endorsed by DOE through other means, whenever applicable;
- 3) Adherence to the provisions of the National Building Code (PD 1096), particularly on the implementation of the “Guidelines for the Energy Conserving Design of Buildings and Utility Systems”;
- 4) Adoption of energy efficiency concepts in the procurement practices of the government;



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- 5) Formulation of plans and programs to achieve at least ten percent (10%) reduction in electricity consumption;
- 6) Use of alternative fuels in government vehicles, among others, to help achieve at least ten percent (10%) fuel reduction in transport fuel consumption; and
- 7) Periodic review of the effectiveness of the energy efficiency and conservation program to include, but not limited to, the phased-in replacement program for lighting in existing or renovated government facilities.

**Section 2. Energy Audit Team (EAT).** For the proper and effective implementation of the government's ECP and austerity measures, an EAT is hereby constituted composed of an Undersecretary of the DOE and a representative from the Office of the President (OP).

**1) The EAT shall be assisted by the following units of DOE:**

- a) Energy Utilization Management Bureau;
- b) Energy Research and Testing Laboratory Services;
- c) Information Technology and Management Services; and
- d) Energy Policy and Planning Bureau.

**2) The EAT shall have the following functions:**

- a) Conduct energy efficiency seminars, energy surveys, audits and spot checks;
- b) Ensure that each government entity designates a senior official as its ECO who will be responsible for the development and implementation of energy efficiency and conservation measures;
- c) Liaise with local government units and encourage them to implement energy efficiency and conservation measures consistent with AO Nos. 103, 110, 110-A and 126;
- d) Coordinate with the ECOs for the proper and effective implementation of energy efficiency measures;
- e) Require ECOs to submit monthly electricity and fuel consumption reports;
- f) Post in a conspicuous place the Agency Rating as a result of the Spot Check it has conducted, following the rating scheme as shown in Annex "A";
- g) Validate the monthly and annual savings reports submitted by government entities;
- h) Follow-up on its findings of deficiency in each agency and ensure that these deficiencies are properly addressed; and,
- i) Adopt other measures not contrary to existing laws, rules and regulations for the strict implementation of the ECP and other energy-related austerity measures.

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The EAT shall prepare and submit a summary report to the President of the Philippines on or before the third (3<sup>rd</sup>) week following the month under review, together with the recommended sanctions, if any, for erring government entities.

### **Section 3. Efficiency and Conservation in Electricity Use**

- 1) Each government entity shall adopt and implement an electricity efficiency and conservation program to reduce monthly electricity consumption by at least ten (10%) percent benchmarked on the average monthly consumption during the 1<sup>st</sup> semester of 2004;
- 2) The following measures shall be implemented by all government entities for particular appliance, equipment and accessories:

a) Operate air-conditioning systems (unitary type or centralized) as follows:

- (i) Limit their operation/use to six (6) hours, preferably from 9:00 am to 4:00 pm. The operation/use of air-conditioning systems may be extended to a maximum duration of eight (8) hours during summer months (March to May) upon the discretion of the Head of Agency. In sensitive and customer service areas, their operation/use beyond eight (8) hours may be allowed; *Provided* that the Head of the Agency supervising such areas shall secure a Memorandum of Exemption (MOE) from the EAT, thereafter, upon verification, the EAT shall issue MOE to the concerned Agency;

Sensitive areas refer to areas with certain temperature requirements such as classified military facilities, Banko Sentral ng Pilipinas printing and minting areas, medicine stock areas in government hospitals, computer server rooms and data bank centers, among others.

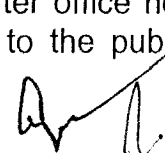
- (ii) Set thermostat control to achieve room temperature of 25<sup>0</sup>C;
- (iii) Set at fan mode from 12:00 noon to 1:00 pm; and
- (iv) Observe regular maintenance servicing and regular cleaning and replacement of filters as necessary.

b) Electric fans, blowers and other cooling devices may be used during the 12:00 noon to 1:00 pm break period in lieu of air-conditioning units;

c) Mandatory replacement of:

- (i) All 40 watt fluorescent lamp tubes with 36 watt or less slim type lamp tubes;
- (ii) All 20 watt fluorescent lamp tubes with 18 watt or less slim type lamp tubes;
- (iii) All rapid start electromagnetic ballasts with preheat type electromagnetic ballasts or electronic ballasts; and
- (iv) All incandescent bulbs with compact fluorescent lamps (CFLs);

d) Lights shall be turned off during lunch breaks and after office hours, except in offices where continuous work or service to the public is being conducted;



- e) Computers are strictly for official use only and shall be shut down when not in use; and
- f) Elevators shall be programmed to bypass the 2<sup>nd</sup> floor or, if possible, set to service alternate floors. A sign to this effect shall be placed conspicuously at the entrance of the elevator for the proper guidance of agency employees and visitors; Provided that the physically-challenged and those with heavy loads shall not be prevented from using the elevator to reach each floor.

**Section 4. Efficiency and Conservation in Fuel Use of Government Vehicles**

- 1) Each government entity shall adopt and implement a program that will reduce its fuel consumption by at least ten (10%) percent benchmarked on the average monthly consumption during the 1<sup>st</sup> semester of 2005.
- 2) The following measures shall be immediately implemented by all government entities for its vehicles:
  - a) Use/purchase or lease of vehicles capable of using Alternative Fuel;
  - b) Use of biodiesel products that comply with the Philippine National Standard (PNS 2020:2003) by blending a DOE-accredited biodiesel product with the diesel to comply with one percent (1%) Coco-Methyl Ester (CME) for use in all diesel-fed vehicles, pursuant to Memorandum Circular (MC) No. 55, series of 2004; and
  - c) Adoption of the maintenance and driving tips indicated hereunder;
    - i) Proper inflation and alignment of tires and proper alignment and balancing of wheels;
    - ii) Periodic / regular oil change and oil filter replacement;
    - iii) Regular engine tune-up and replacement of air and fuel filters;
    - iv) Proper scheduling of daily trips to avoid unnecessary short trips;
    - v) Smooth / moderate acceleration of vehicles and driving at a steady pace to avoid unnecessary and repetitious speeding up and slowing down;
    - vi) Strict prohibition on idling of engines when vehicle is parked; and
    - vii) Prohibition on overloading of vehicle.
- 3) To develop a more dynamic and effective program for the rational use of energy, the following acts are hereby prohibited:
  - a) The use of government vehicles for purposes other than official business: *Provided*, that in every case, the trip ticket authorizing the use of the vehicle shall be displayed on the windshield or in a conspicuous place on the vehicle: *Provided, further*, that vehicles used by intelligence and investigative agencies of the government shall not be covered by this provision;



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- b) The use of government vehicles on Saturdays, Sundays, legal holidays, or out of the regular office hours or outside the route of the officials or employees authorized to use them, or by any person other than such official or employee, shall, unless properly authorized, be ***prima facie evidence*** of the violation of this paragraph.

#### RULE IV DESIGNATION OF ENERGY CONSERVATION OFFICER

**Section 1. *Designation of Energy Conservation Officer (ECO).*** To fully address the thrust of government's program on energy conservation and efficiency, the Head of each government entity shall designate a senior official as its ECO.

The names of the designated ECOs must be submitted to the DOE through the EAT within one (1) month upon the effectivity of this IRR and updated in the event of any change in the ECO designate.

**Section 2. *Functions of Energy Conservation Officer.*** The ECO, who is responsible for the effective implementation and administration of energy conservation and efficiency program of the government entity concerned, shall have the following duties and responsibilities:

- 1) Prepare, formulate and submit for approval to the Head of the government entity the design, plan and implementation, monitoring and evaluation scheme for the ECP consistent with the provisions of AO Nos. 103, 110, 110-A and 126 and this IRR;
- 2) Submit to the EAT not later than the 15<sup>th</sup> day of January of each year the approved annual ECP. The ECP shall include energy conservation measures, target savings, motor vehicle inventory, and other strategies as stated in Rule III, Section 1 of this IRR, the total annual electricity and fuel consumption and savings for the one (1) year period covering September 2005 - August 2006 and every year thereafter;
- 3) In case of modification at any point/time of the year, the revised ECP must be resubmitted to EAT, which shall likewise include a list of energy efficient equipment/materials/devices, and/or service vehicles to be procured or already procured; and
- 4) Provide regular update to contain monthly breakdown on the Energy Performance of the government entity, utilizing the Electricity Consumption Report Form attached as Annex "B1" and the Fuel Consumption Report Form attached as Annex "B2", and to submit a report to the EAT not later than the 15<sup>th</sup> day of the month following the period to be reported.

#### RULE V SAVINGS

**Section 1. *Source of Savings.*** Pursuant to AO Nos. 103, 110, 110-A, and 126, all government entities are required to reduce their monthly consumption for electricity (in kilowatt-hours) and petroleum products (in liters) by at least ten percent (10%) through the implementation of the GEMP. The result of the reduction shall be the government entity's/government facility's corresponding savings.



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## Section 2. Computation of Savings in Energy Efficiency and Conservation

- 1) **Savings from Electricity Use** -The amount of savings in kilowatt-hour (kWh) during the reporting month shall be equivalent to the reduction in the monthly electricity consumption as benchmarked on the average monthly electricity consumption for the 1<sup>st</sup> semester of 2004.

Monthly Savings in Electricity, kWh = Jan. to June 2004 Ave. Monthly Electricity Consumption less Monthly Electricity Consumption.

*To compute for the equivalent Peso Savings, multiply the monthly kWh savings in electricity by the current average electricity rates per kWh (₱/kWh).*

Monthly Savings in Electricity (kWh) x Peso / kWh average rate for that period = equivalent Peso Savings

The Annual Saving shall be the cumulative saving for the twelve-month period

**Σ Monthly savings for 12 months = Annual Savings (Pesos)**

- 2) **Savings from Fuel Use** - The amount of savings in liters during the reporting month shall be equivalent to the reduction in the monthly fuel consumption as benchmarked on the average monthly fuel consumption for the 1<sup>st</sup> semester of 2005.

a) *Gasoline*

Monthly Savings in Gasoline (Liters) = Jan. to June 2005 Ave. Monthly Gasoline Consumption less Monthly Gasoline Consumption.

*To compute for the equivalent Peso Savings, multiply the monthly liters savings in gasoline by the current average gasoline rates per liters (₱/liters).*

Monthly Savings in Gasoline (liters.) x peso / liter equivalent for that period = equivalent Peso Savings

b) *Diesel*

Monthly Savings in Blended Diesel (Liters) = Jan. to June 2005 Monthly Diesel Consumption less Present Month's Blended Diesel Consumption.

*To compute for the equivalent Peso Savings, multiply the monthly blended diesel in liters savings in diesel by the current average diesel rates per liters (₱/liters).*

Monthly Savings in Blended Diesel (liters.) x peso/liter equivalent for that period = equivalent Peso Savings

The Annual saving shall be the cumulative saving for the twelve-month period

**Σ Monthly savings for 12 months = Annual Savings (Peso)**



**Total Savings (P)= (Annual Electricity Savings + Annual Fuel savings)**

**Section 3. Allowable use of the ten percent (10%) savings.** Consistent with the provisions of Section 3.2 of Administrative Order No. 110, as amended by Section 1 of Administrative Order No.110-A, the use of accumulated savings from the twelve-month period starting September 1, 2005 and every year thereafter for purposes stated in Section 4 below shall be allowed as follows:

- a) For government entities that failed to attain the required minimum ten percent (10%) savings, the use of its savings shall be limited to only fifty percent (50%) of their accumulated savings in electricity consumption (in kWh) or petroleum products (in liters).
- b) For government entities which attained ten percent (10%) savings or more, they may be allowed to use one hundred percent (100%) of their accumulated savings in electricity consumption (in kWh) or petroleum products (in liter).

**Section 4. Use of generated savings.** Upon verification and recommendation of the EAT, generated savings shall be utilized to finance improvement in energy efficiency of the government entity/facility after which, succeeding/remaining equivalent Annual Peso savings may be used to give benefits and incentives to the employees in the following order of priority:

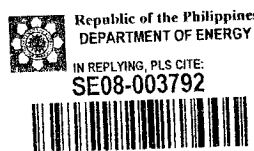
- 1) Upgrade/Lease/Purchase of vehicles to be used by employees as shuttle service;
- 2) Purchase/Lease of service vehicles to replace the old and inefficient units assigned to officials;
- 3) Citations or recognitions; and
- 4) Granting of other benefits to employees, consistent with the Collective Negotiation Agreement (CNA);

## RULE VI SYSTEM OF REWARDS

**Section 1. Recognition.** Government entities which attained at least ten percent (10%) savings in electricity and fuel consumption shall be awarded by the DOE, through the EAT, with a Certificate of Recognition in order to motivate and inspire public servants to help implement the ECP. Hereunder are the criteria for the conferment of awards:

- 1) Effectiveness of strategies employed;
- 2) Level of energy savings in fuel and electricity;
- 3) Accurateness and clarity of the report;
- 4) Completeness of report; and
- 5) Promptness in submitting report.

**Section 2. Incentives.** A government entity/government facility which has attained efficient level for its energy facilities and equipment, as well as supplies, may set aside and use succeeding/remaining equivalent Annual Peso Savings to continuously maintain the efficient operation of the building/facilities upon the discretion of the Agency Head. Thereupon, it shall submit copies or documentation to the EAT on the activities made on the use of the incentives.





**RULE VII  
INTER-AGENCY COORDINATION**

**Section 1. Inter-Agency Coordination.** The **DOE, DBM, DTI, DENR, DPWH, NHA, DepED, DILG and PIA-OPS**, shall have the following roles and responsibilities:

- 1) The **DOE**, through the Energy Utilization and Management Bureau (EUMB), shall serve as lead unit in the implementation of energy efficiency and conservation program. Further, EUMB, through the Energy Research and Testing Laboratory (ERTLS), and in cooperation with DTI, shall continue to oversee and implement the Energy Labeling Program for lamps and ballasts.
- 2) The **DBM**, through its Procurement Service, shall assist the government entities in the procurement of energy efficient supplies and equipment based on the DOE certified specifications and/or ratings.
- 3) The **DTI** shall, in consultation with appropriate trade and industry associations, develop voluntary energy conservation programs through agreements with their respective members, which will target levels of reduction in electricity and petroleum products consumption following the provisions in this IRR. It shall likewise, provide complementary policies and activities to ensure that lighting products and other devices for that purpose shall meet the specifications under the Philippine National Standard (PNS), as well as applicable MEPS for consumer protection.
- 4) The **DENR** shall, in coordination with appropriate law enforcement agencies, enforce strictly the smoke-belching law for all vehicles. In addition, the DENR, through its Environmental Management Bureau (EMB) shall promulgate/implement policies consistent with proper appliance (aircon, other energy fixtures) and lamp waste management.
- 5) The **DPWH**, in coordination with **NHA** and **DepEd**, shall implement the energy efficient building on government housing and school buildings respectively, in accordance with the Guidelines for the Energy Conserving Design of Buildings and Utility Systems and all other government buildings/facilities and other relevant infrastructure development projects.
- 6) The **DILG** shall devise action plans to encourage the Local Government Units (LGUs) on the use of efficient energy systems, including lighting and lighting products in their facilities.
- 7) The **PIA-OPS** shall launch a nationwide information dissemination campaign on energy conservation through broadcast and print media, including production and distribution of materials related and consistent with the provisions of this IRR, that can be adopted at the family, community and industry level.

All agencies mentioned above shall submit monthly electricity and fuel consumption reports every 15<sup>th</sup> day of the month following the period to be reported and submit the annual ECP not later than the 15<sup>th</sup> day of January and every year thereafter, as stipulated under Rule IV, Section (2) item (2) and (4) of this IRR.



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**RULE VIII  
OTHER PROVISIONS**

**Section 1. *Compliance and Sanctions.*** Non-compliance with the provisions of AO Nos. 103, 110, 110-A, 126 and 183 or any of the provisions of this IRR shall subject any official to administrative sanctions as provided by applicable laws and other rules and regulations.

**Section 2. *Amendment.*** The DOE, with the concurrence of DBM, may amend or modify these Rules as may be deemed necessary.

**Section 3. *Separability Clause.*** If any provision of this IRR is declared unconstitutional, the same shall not affect the validity and effectivity of the other provisions hereof.

**Section 4. *Effectivity.*** This IRR shall take effect fifteen (15) days after publication in a newspaper of general circulation.

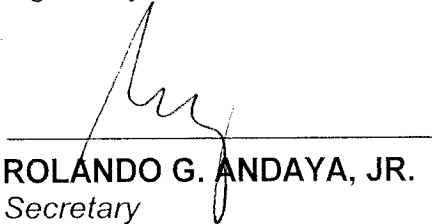
**DONE** in the City of Manila, this 30<sup>th</sup> day of May, in the year of our Lord, Two Thousand and Eight.

Signed by:



**ANGELO T. REYES**  
*Secretary*  
Department of Energy

Signed by:



**ROLANDO G. ANDAYA, JR.**  
*Secretary*  
Department of Budget and Management

Republic Of the Philippines  
 DEPARTMENT OF ENERGY  
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# "Annex B1"

GOVERNMENT ENERGY MANAGEMENT PROGRAM  
 Monthly Electricity Consumption Report  
 For the Month of \_\_\_\_\_, 200\_\_

Agency : \_\_\_\_\_

Telephone Nos. : \_\_\_\_\_

Address : \_\_\_\_\_

Fax Nos. : \_\_\_\_\_

A Building Description	B Gross Area (square meters)	C Air-Conditioned Area (square meters)	D Number of Occupants	E January - June 2004 Average Monthly Consumption, kWh	F Monthly Consumption, kWh	G Monthly Savings*		H
						kWh	Percent, %	

(Add rows when necessary)

$$\text{kWh Savings (G)} = \text{E} - \text{F}$$

$$\% \text{ Savings (H)} = \frac{\text{G}}{\text{E}} \times 100$$

Prepared by: \_\_\_\_\_  
 Energy Conservation Officer

(Start of submission is September 2005 onwards)

Republic Of the Philippines  
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"Annex B2"

GOVERNMENT ENERGY MANAGEMENT PROGRAM  
 Monthly Fuel Consumption Report  
 For the Month of \_\_\_\_\_, 200\_\_

Agency : \_\_\_\_\_

Telephone Nos. : \_\_\_\_\_

Address : \_\_\_\_\_

Fax Nos. : \_\_\_\_\_

January - June 2005 Average Monthly Consumption		Monthly Fuel Consumption		Monthly Savings		Percent Savings	
Gasoline, liters	Diesel, liters	Gasoline, liters	Diesel, liters	Gasoline	Diesel	Gasoline	Diesel

Monthly Savings in Gasoline, liters = Jan. to Jun. 2005 Ave. Monthly Gasoline Consumption - Present Month's gasoline consumption

Monthly Savings in Blended Diesel, Liters = Jan. to Jun. 2005 Ave. Monthly Diesel Consumption - Present Month's blended diesel consumption

$$\% \text{ Savings} = \frac{\text{Monthly Savings}}{\text{Average Monthly Consumption from Jan. to Jun. 2005}} \times 100$$

Prepared by: \_\_\_\_\_  
 Energy Conservation Officer

(Start of submission is September 2005 onwards)