

# DEPARTMENT OF ENERGY

## ENERGY UTILIZATION MANAGEMENT BUREAU

### ENERGY EFFICIENCY AND CONSERVATION DIVISION

#### DIALOGUE MEETING

January 14, 2008



*“Towards Energy Independence”*



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● **Energy Situation**



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## Facts

- Crude Oil Supply is **FAST DEPLETING** (*Human activity*)
- Wide Price Swing due to **SHORTAGE** or **OVERSUPPLY** (*war, oil embargo, supply cut, quota increase*)
- Simply **EXPENSIVE** Crude Oil Price in the World Market (*dynamic market forces*)



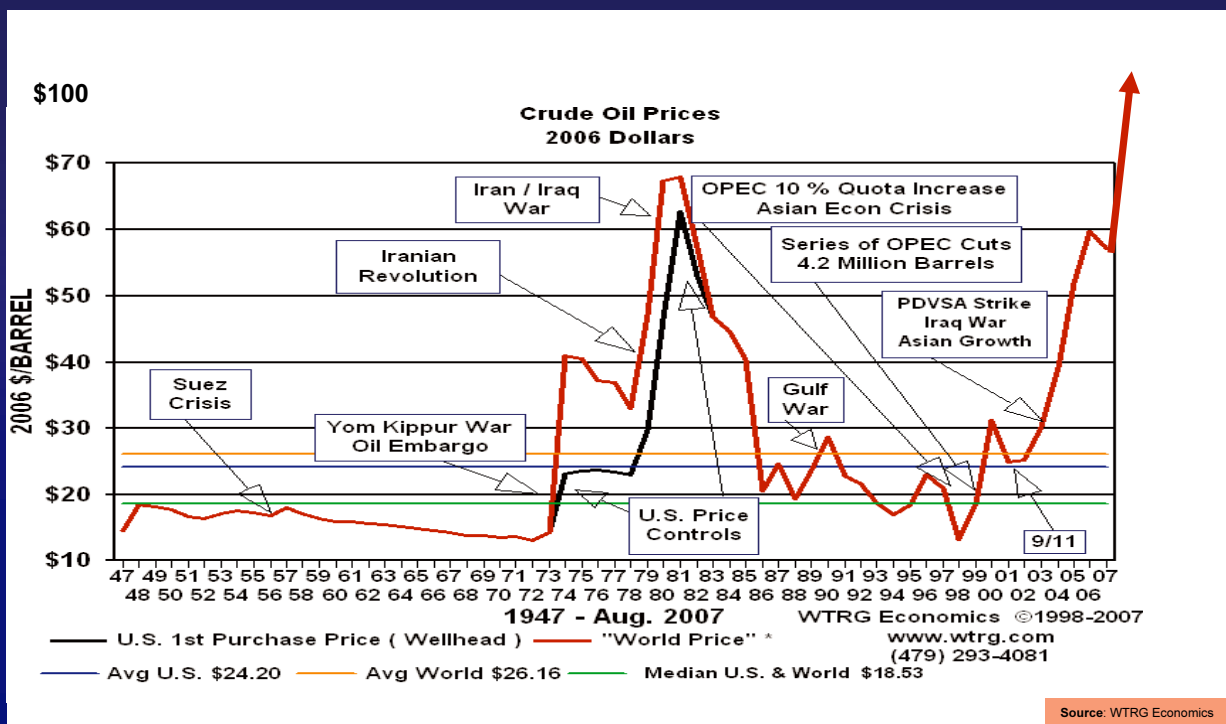
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## Expensive Energy



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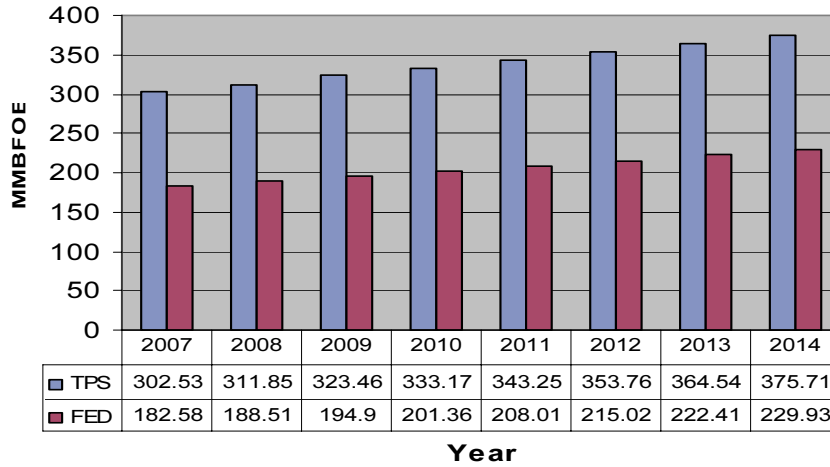
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## TARGET Energy Supply and Demand (2007 -2014)

### Overall Energy Balance (MMBFOE)



TPS – Total Primary Supply (3% Annual Ave. Growth)

FED - Final Energy Demand (3% Annual Ave. Growth)



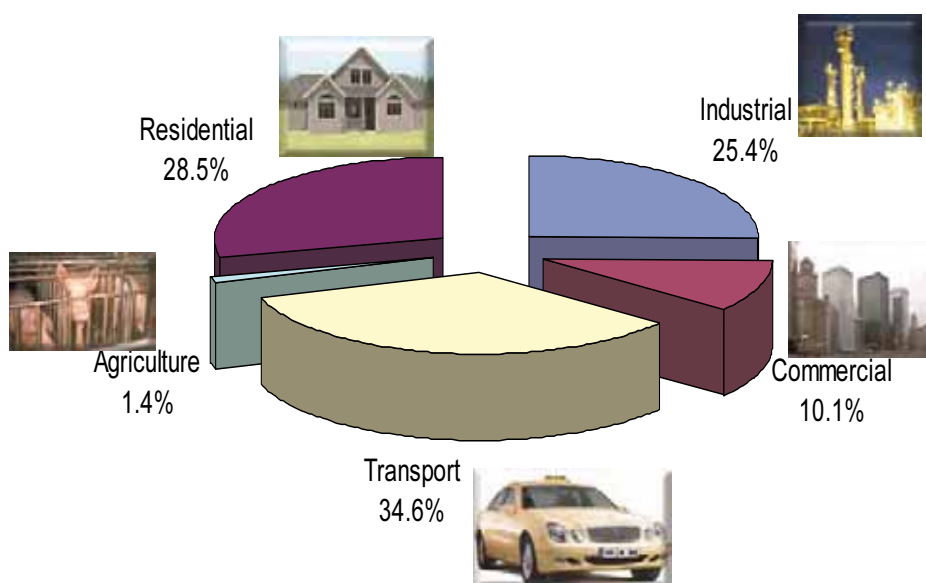
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### ENERGY DEMAND BY SECTOR (%)



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# Addressing High Cost of Energy



## The “National Energy Efficiency & Conservation Program” (NEECP)

Launched by President Gloria Macapagal-Arroyo last August 2004 to further strengthen the implementation of the energy efficiency and conservation programs in the country. The General Objective is **to make energy efficiency and conservation (EE&C) a way of life.**

### Specific Objectives:

- (1) **To cushion the impact in the increase in prices** of petroleum products and electricity through the implementation of energy efficiency and conservation measures;
- (2) **To promote cost avoidance/savings** on fuel and electricity without sacrificing productivity; and,
- (3) To help **protect the environment.**

OFFICIAL LOGO →



## i. Government Five (5) Point Energy Reform Agenda on Energy Independence and Savings

It aims to achieve a **60-percent self sufficiency level by 2010** to shield the country from the price volatility of imported energy. This would be achieved through:

1. increase reserves of indigenous oil and gas;
2. aggressive development of renewable energy potential such as biomass, solar, wind and ocean resources;
3. increase the use of alternative fuels;
4. form strategic alliances with other countries; and
5. **Strengthen and enhance energy efficiency and conservation programs.**



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## ii. NEECP Sub-Program Components and Activities

- **A. Information, Education and Communication Campaign**
- **B. Standard and Labeling for Household Appliances**
- **C. Fuel Economy Run**
- **D. Government Energy Management Program**
- **E. Energy Management Services / Energy Audit**
- **F. Recognition Award**
- **G. Voluntary Agreement Program**



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## A. Information, Education and Communication Campaign

### SEMINAR - WORKSHOP

#### a. "Power Conservation and Demand Management"

Target Sectors:

Household, Industrial,  
Commercial, Academic  
Institutions



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### SEMINAR - WORKSHOP

#### b. "Fuel Conservation and Efficiency in Road Transport"

Target Sectors:

Private and Public Transport  
Drivers, Members of Transport  
Associations and Operators



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## SEMINAR - WORKSHOP

c. "Energy Efficiency & Conservation in Government Building"

Target Sectors:

**Government Employees**



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## TRI-MEDIA CAMPAIGN

a. Print / Broad Sheet Newspapers

(Publication of Enercon Tips on Electricity & Fuel)

b. TV Ad

c. Radio Ad

(30s TV plugs aired on various television channels and 30s Radio plug in over 100 KBP member-radio stations nationwide)

## INFOMERCIALS

a. Mediatron (Electronic Billboard)



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## PUBLICATION AND COLLATERALS

- Flyers on Fuel and Electricity Saving Tips
- Brochures / Messages on Fuel and Electricity Conservation



## FUEL TIPID TIPS

- Keep your engine properly tuned. Tuning a car can improve gas mileage up to 4 percent.
- Keep tires properly inflated to improve your gas mileage by more than 3 percent.
- Share a ride with others to reduce your fuel costs and the wear on your car.

A Partnership of  
the Department of Energy and  
Philippine Shell Petroleum Corporation

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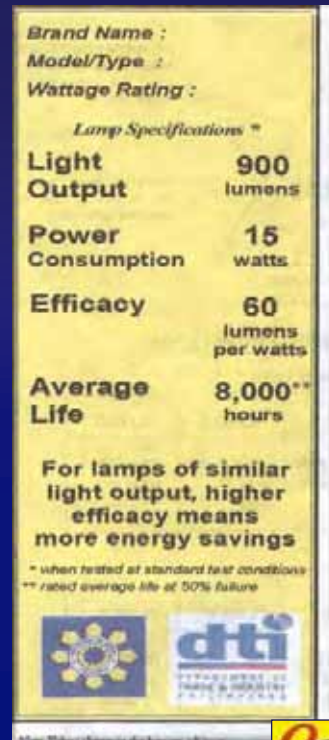
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## B. Standard and Labelling for Household Appliances

- Window Type Airconditioner
- Refrigerator and Freezer
- CFL Lamp



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## C. Fuel Economy Run

### OBJECTIVES:

- To establish Fuel Mileage Rating
- To eventually Label all Brand New Models of Passenger Cars and Light Duty Vehicles
- To empower the Consumers in Choosing the most efficient vehicle sold in the market



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## D. Government Energy Management Program (GEMP)

### Status of Implementation

- Spot Checks in Government Buildings
    - Metro Manila – 76
    - Regional Offices (Luzon) – 44
    - Regional Offices (Visayas) – 37
    - Regional Offices (Mindanao) – 69
- Total: 226 Buildings**
- Fuel & Electricity Monthly Monitoring ( Period Covered: Sept. 2005 – October 2007)

	Fuel Savings		Electricity Savings	
	( Liters )	(Million Pesos)	(Kwh)	(Million Pesos)
○ NCR :	2,632,692	93	79,460,178	616
○ Regional :	300,329	12	8,190,872	54
<b>○ TOTAL :</b>	<b>2,933,021</b>	<b>105</b>	<b>87,651,050</b>	<b>670</b>



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## Spot Check and Posting of Grades in Government Building



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## E. Energy Management Services / Energy Audit

- Energy audit is the heart of a successful total energy management program
- An energy audit is a critical examination of an energy-consuming equipment or facility
- Proponent of DOE Energy Audit Service includes manufacturing, commercial & Government buildings, power distributors, among others.



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## F. Recognition Award Program

- The Award giving body is headed by the DOE Secretary as Chair of the Steering Committee.
- Member Representatives to the Steering and Technical Committee were from the Petroleum Industries, Power Distributors & Generators and NGO's
- Started in 1982, in recognition of the founder of the Enercon Movement in 1979, Mr. Emilio Abello
- Year 2007 is the 25<sup>th</sup> year Anniversary of the Don Emilio Abello Energy Efficiency Award

### The Don Emilio Abello Energy Efficiency Award 2007



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## G. Voluntary Agreement Program



### Vehicle Use Reduction Program

- encourages vehicle owner to use public transport to conserve fuel.

### Placemats Program

- encourages the leading food chains to use placemats with fuel efficiency and conservation, as well as power conservation and demand management themes.

### Partnership with the Private Business Sector

- Establish partnership with the Commercial & Industrial establishment with the objective of disseminating EE&C applicable technologies, programs and measures through conduct of in-house seminars; by providing energy audit service; by recognizing establishment who implemented Energy Management System as part of the Corporate management operation, among others.



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## Foreign Assisted Projects

### “ASEAN PROMOTION OF ENERGY CONSERVATION AND EFFICIENCY PROJECT” (ASEAN-PROMEEC)

- A. ASEAN Promotion of Energy Efficiency and Conservation (ASEAN-PROMEEC) - Industry, Buildings and Energy Management
- B. ASEAN Best Practices Competition Award on Energy Conservation & Efficiency in Buildings
- C. ASEAN Energy Management Competition Award for Industries and Buildings

### UNDP-GEF: Philippine Efficient Lighting Market Transformation Project (PELMATP)



## VI. EE&C Laws and Presidential Issuances that Supports Energy Efficiency and Conservation

### 1. Current REGULATORY Policies/Framework

- DOE MEMORANDUM CIRCULAR No. 93-03-05 (Energy Consumption Monitoring)
- EXECUTIVE ORDER No. 123 (Power Conservation)
- EXECUTIVE ORDER No. 472 (Fuel Conservation in Road Transport)
- ADMINISTRATIVE ORDER No. 103
- ADMINISTRATIVE ORDER No. 110
- ADMINISTRATIVE ORDER No. 126
- ADMINISTRATIVE ORDER No. 183

Sectors:  
Industrial,  
Commercial,  
Transport,  
Households,  
Power

Government Building Sector



## 2. Previous REGULATORY Policies/Framework

- **Energy Conservation Law (1980 – 1990)**

BP 73 (June 11, 1980): An Act to further promote Energy Conservation and for other purposes [1980 – 1985]

BP 872 ( June 10, 1985): An Act amending sections ten and fourteen of BP 73 [ Extending BP [Empowerment of Ministers of various Ministries to perform certain acts; and, extension of enforcement of BP 73 for another 5-year period ( 1985-1990)].

- **Department Circular 95-08-007 (August 2, 1995): Instituting Demand Side Management by Electric Utilities (DSM Order)**



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### Vision

1. Passage of Enercon Bill into Law
2. Accreditation of Energy Manager
3. Energy Management Standard based on ISO Framework
4. Expand Labeling Program to include Road Transport Vehicles
5. Establish Energy Benchmark in Industries and Buildings
6. Full implementation of Energy Conserving Design in Building and Utility System
7. Sustainable Awareness Campaign in the Commercial, Industrial, Residential and Transport sectors
8. Improvement of Heat Rates in Power Plants and Systems Loss in the Distribution Line
9. Promote Green Building
10. Reactivate implementation of Demand Side Management (DSM)



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