

PEP 2008-2030 Public Consultation



Department of Energy

OUTLINE OF PRESENTATION

Energy and Development



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Strategic Actions of the Energy Sector

Energy and Development



ENERGY AS A CRUCIAL COMMODITY

- INDISPENSABLE TO ECONOMIC GROWTH
- COUNTRY'S DRIVER TOWARDS GLOBAL COMPETITIVENESS
- INSTRUMENT FOR POVERTY REDUCTION AND SOCIAL EQUITY
- ENVIRONMENTAL DIMENSIONS OF ENERGY POLICIES

Current Energy Situation



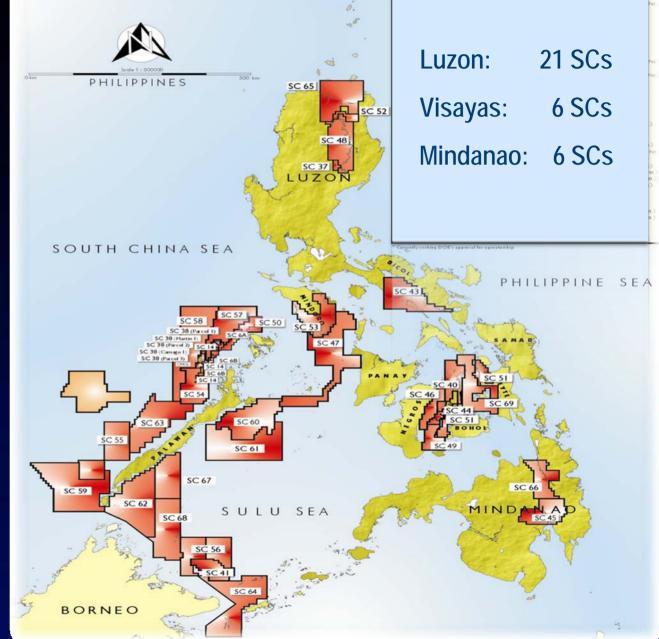
PRIMARY ENERGY MIX

2006 2007 Local Oil Local Oil 1.6% 1.4% **Natural Gas Imported Coal Natural Gas Imported Coal** 7.7% 10.3% 6.5% 10.5% Local Coal Local Coal 4.6% 3.2% Geotherma Geothermal Imported Oil 22.3% Imported Oil 23.2% 34.0% 34.1% Hydropower **Hydropower** 5.4% 6.4% Ethanol Solar, Wind & Ethanol **Biomass** Solar, Wind & 0.0% **Biomass** Micro-hydro 0.0% **Micro-hydro** 14.1% 14.6% CME 0.0% CME 0.0% 0.1% 0.0%

Self Sufficiency Level = 55.4%

Self Sufficiency Level = 55.7%

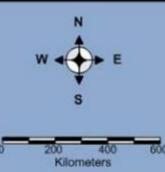
EXISTING PETROLEUM SERVICE CONTRACTS



Coal Basins of the Philippines

South China Sea

Spratly Islands



POTENTIAL RESERVES:

Polillo - Bata

Visayas

Mindanao

Davao

amboa

Semirara

746 Million Metric Tons

Philippine Sea

Source: Geothermal & Coal Resources Development Division Prepared by: Anel R. Rasdas

RENEWABLE ENERGY RESOURCES 2007 Performance Highlights

| Resource | Accomplishments, in MW (as of 2007) |
|------------|--|
| Hydropower | 3,367.070 |
| Geothermal | 2,027.065 |
| Wind | 25.250 |
| Biomass | 20.930 |
| Solar | 5.161 |
| Ocean | - |
| TOTAL | 5,445.476 |

Note: Installed capacity for geothermal includes decommissioned plants. Hydropower and solar on the other hand includes those not connected in the grid.

ALTERNATIVE FUELS

- Signing of Republic Act 9367 or the Biofuels Act of 2006
- **Biodiesel**



- Production capacity @ 302.62 million liters
- Mandated 1% biodiesel blend in May 2007
 Bioethanol
- Mandated 5% ethanol blend in 2009
- Voluntary 10% ethanol blend available in all Seaoil stations nationwide, 55 Shell and 14 Petron stations in greater Manila area
- 5 Ethanol production plant projects endorsed and registered under BOI/IPP

ALTERNATIVE FUELS

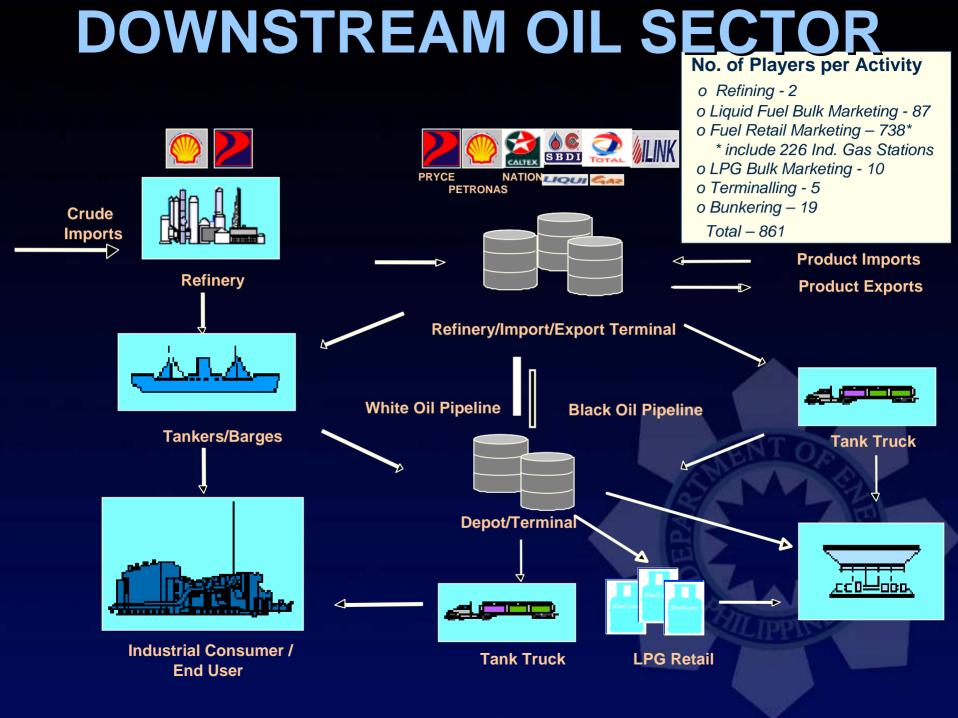
AutoLPG

- 13,886 auto-LPG taxis converted
- Il licensee auto-LPG conversion shops

CNG

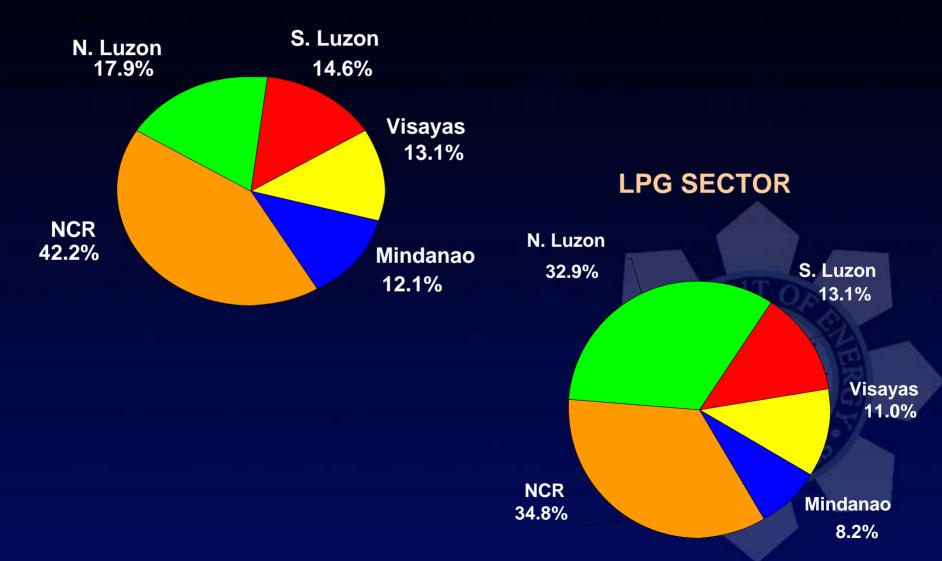
- Inauguration of CNG Mother-Daughter stations in Batangas and Laguna in October 2007
- 22 CNG buses plying along Batangas-Laguna-Manila route
- Conducted Libreng Sakay of CNG buses: 24 March 06 April 2008





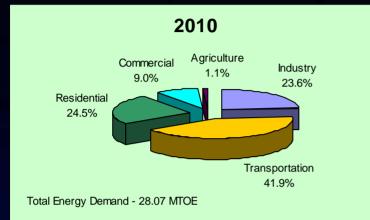
FY 2007 PETROLEUM PRODUCTS IN THE PHILS.

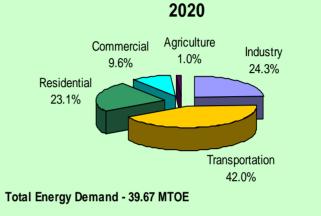
REGIONAL DEMAND SHARE (Total)



Energy Demand Outlook

TOTAL ENERGY DEMAND





2030 Commercial Agriculture 10.0% 1.0% Industry 25.9% Transportation 40.4% Total Energy Demand - 51.31 MTOE



TOTAL ENERGY DEMAND BY SECTOR

| Sector | Share | AAGR |
|----------------|--------|-------|
| Transportation | 41.58 | 3.8 % |
| Industry | 24.46 | 3.8 % |
| Residential | 23.40 | 2.6 % |
| Commercial | 9.54 | 3.9 % |
| Agriculture | 1.01 | 2.4 % |
| TOTAL | 100.00 | 3.5 % |

TOTAL ENERGY DEMAND BY FUEL

| Fuel Type | Share | AAGR |
|-------------|--------|-------|
| Oil | 54.12 | 3.6 % |
| Coal | 5.66 | 4.2 % |
| Natural Gas | 0.23 | 2.9 % |
| Electricity | 22.12 | 5.2 % |
| Biomass | 17.86 | 1.3 % |
| TOTAL | 100.00 | 3.5 % |

Strategic Actions

of the Energy Sector



THE IDEAL ENERGY STATE TOWARDS 2030



Ensuring the best energy choices to empowered Filipinos for a better quality of life.

STRATEGIC DIRECTIONS

- Ensure consistent, comprehensive, responsive and integrated energy policy
- Identify and achieve the optimal energy mix
- Promote green and clean energy
- Institutionalize social mobilization and monitoring

POLICY THRUSTS

- Intensify development and utilization of renewable and environment-friendly alternative energy resources/technologies
- Accelerate exploration and development of geothermal, oil, gas, and coal resources
- Enhance energy efficiency and conservation
- ✤ Attain nationwide electrification
- Maintain a competitive energy investment climate
- 2. Make energy prices reasonable and affordable
- 3. Implement social mobilization and monitoring mechanism



Ensure stable and quality supply of energy Intensify development and utilization of renewable and environment-friendly alternative energy resources/technologies Pursue the immediate passage of the **Renewable Energy Bill** Accelerate implementation of the Biofuels Law and Natural Gas Vehicle Program for Public Transport (NGVPPT) program Promotion of the application of environmentfriendly energy technologies Create a one-stop-shop for processing sustainable energy projects

- Accelerate exploration and development of geothermal, oil, gas and coal resources
 - Intensify search for geothermal, oil, gas and coal resources through continued public bid rounds and improved service contracting schemes
 - Promote and implement Philippine Energy Contracting Rounds (PECRs) and award service contracts





- Accelerate exploration and development of geothermal, oil, gas and coal resources
 - Advocate immediate passage of the Downstream Natural Gas Bill
 - Pursue the development of strategic infrastructures
 - Expand the utilization of natural gas in power, transport, industry, buildings and agriculture
 - Establish the Philippine Natural Gas Institute



- Enhance energy efficiency and conservation
 - Continue to implement the National Energy Efficiency and Conservation Program (NEECP)
 - ✓ Intensify the "Palit-Ilaw" Program
 - Develop/Promulgate/Implement, together with DTI-BPS, a Minimum Energy Performance Standards to phase out the least efficient lamps in the market by 2009
 - Continue implementation and expansion of coverage of the energy labeling of the Philippines
 - Advocate for the immediate passage of the Energy Conservation Bill



- Attain Nationwide Electrification
 - Accelerate Expanded Rural Electrification Program
 - Achieve 100% barangay electrification by 2009
 - Energize remaining 1,282 unelectrified barangays
 - Intensify household electrification
 - Pursue Private Sector Participation in Rural and Missionary Areas
 - Continue offer of NPC-SPUG areas to New Private Power Providers
 - Operationalize Public-Private Partnership Programs (e.g., QTP Program)



- 1. Ensure stable and quality supply of energy
 - Maintain a competitive energy investment climate
 - Ensure sufficient, stable and accessible energy supply meeting quality and safety standards
 - Provide a level-playing field in the conduct of business
 - Encourage investment in efficient and economic modes of energy marketing and distribution
 - Promote investment in strategic energy infrastructure
 - Encourage greater private sector investments and participation through market-based incentives



- 1. Ensure stable and quality supply of energy
 - * Nuclear Power as a long-term energy option
 - Enhance human resource capacity building
 - Option for Philippine Nuclear Power Plant-1 (PNPP-1)

2. Make Energy Prices Reasonable and Affordable

Reduce Electricity Costs

- Pursue full privatization of the remaining NPC assets and contracted energy outputs
- Accelerate implementation of open access and retail competition; to start in economic zones
- Ensure better targeting and implementation of subsidies for the poor and facilitating industry competitiveness
- Implement Demand Side Management (DSM)
- Intensify public sector involvement in reform process

2. Make Energy Prices Reasonable and Affordable

- Mitigate the effects of oil price increases
 - Zero percent tariff rate effective 01 June 2008 from a 3.0 percent rate
 - Energy Contingency Task Force (ECTF) reactivation
 - "Katas ng Vat" (Initially P4 Billion) P 3 Billion for Energy Sector
 - MOA signed between DSWD and NEA on the program "Pantawid"

Kuryente: Katas ng VAT"

- Palit-Ilaw (SWITCH)
- Engine Conversion to LPG/CNG

3. Implement social mobilization and monitoring mechanism

- Launched the SWITCH Movement (16 July 2008) with five (5) initial areas of focus :
 - 1. Switch from inefficient to efficient energy practices-starting with lighting- in workplaces, buildings, homes and public places
 - 2. Switch from petroleum-based fuels to alternative fuels and cleaner technologies in the transport sector
 - Switch from kerosene to renewable energy sources for lighting and basic electricity in remote rural areas
 - 4. Switch from fossil fuel-based technologies to renewable energy technologies in power generation, where feasible at the local level
 - 5. Switch from vestiges of centralized energy planning to more participative, bottom-up energy planning at the local level

MARAMING SALAMAT