

Climate Change, Energy & Development Planning:

A Multi-Sectoral Regional Dialogue

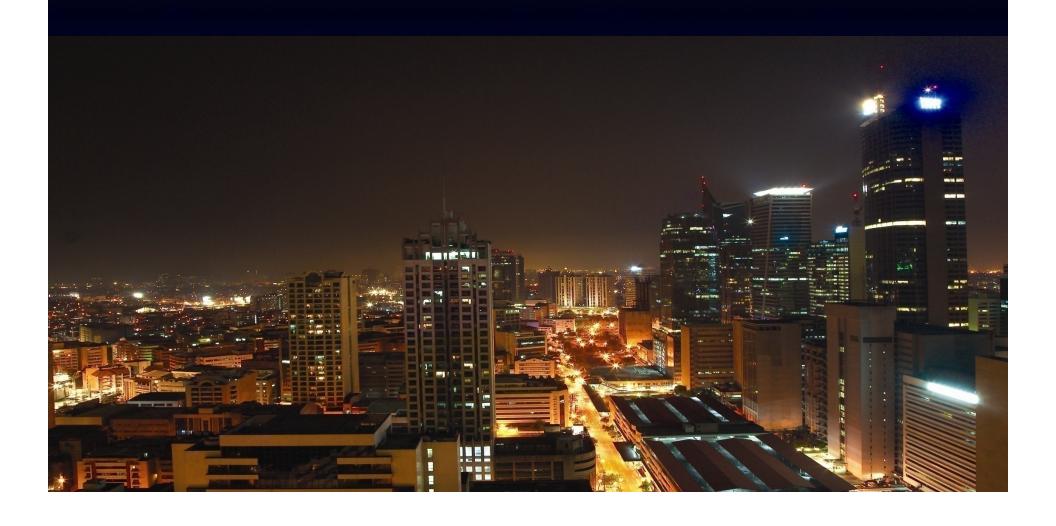


Department of Energy

OUTLINE OF PRESENTATION

- Energy and Development
- Current Energy Situation
- Strategic Actions of the Energy Sector





ENERGY AS A CRUCIAL COMMODITY

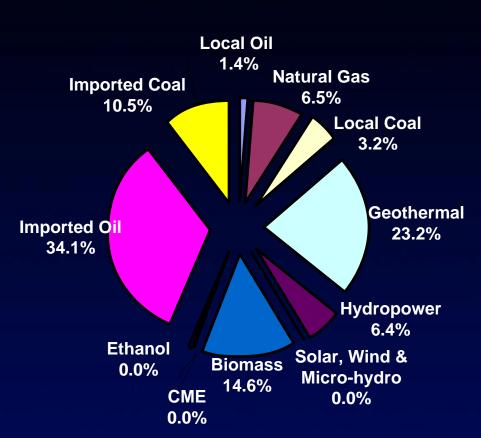
- INDISPENSABLE TO ECONOMIC GROWTH
- COUNTRY'S DRIVER TOWARDS GLOBAL COMPETITIVENESS
- INSTRUMENT FOR POVERTY REDUCTION AND SOCIAL EQUITY
- ENVIRONMENTAL DIMENSIONS OF ENERGY POLICIES

Current Energy Situation



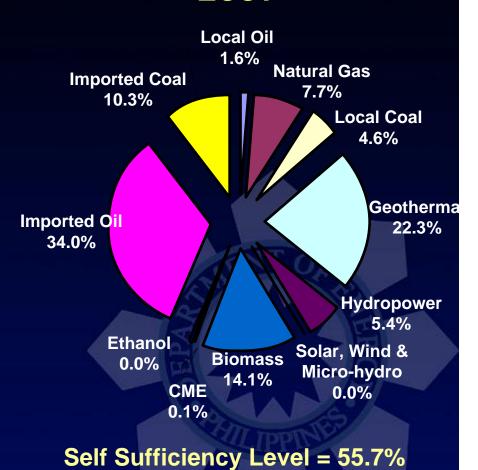
PRIMARY ENERGY MIX





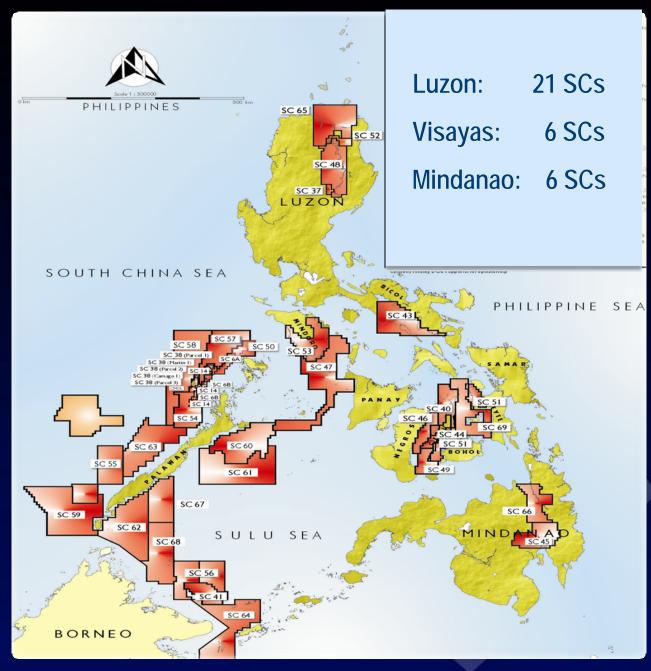
Self Sufficiency Level = 55.4%

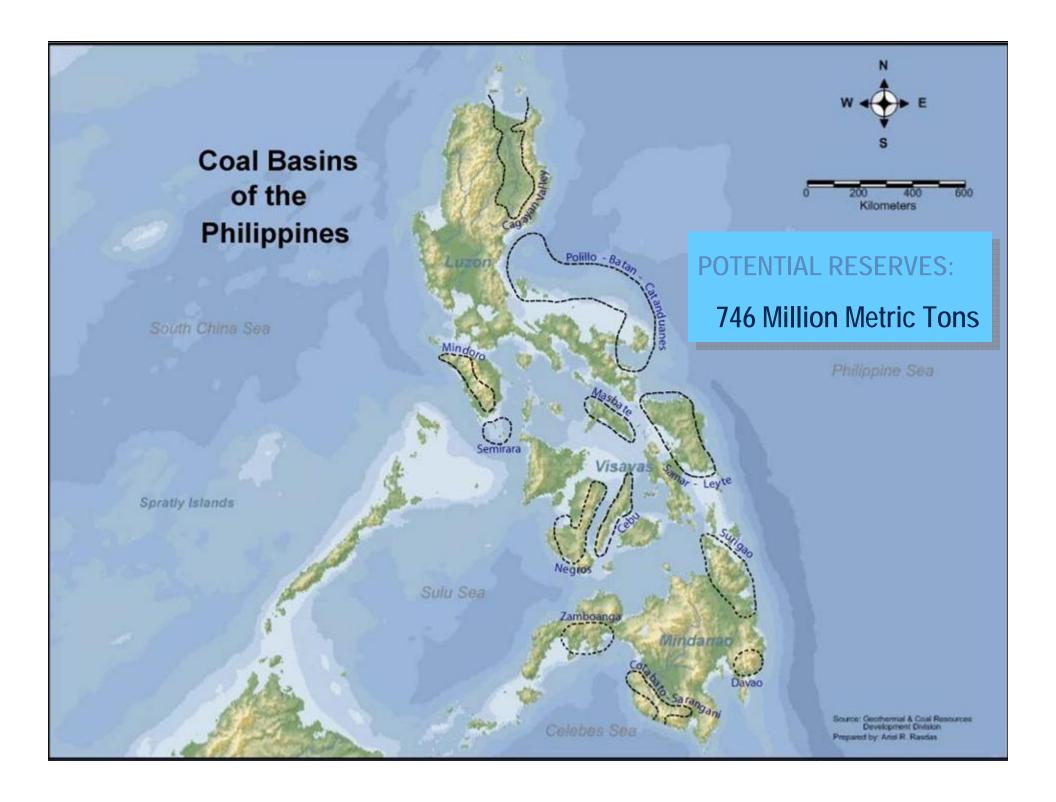
2007



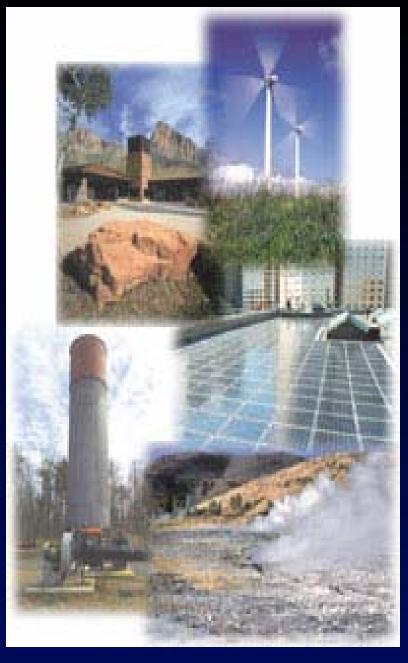
EXISTING PETROLEUM

SERVICE CONTRACTS





RENEWABLE ENERGY RESOURCES



Potential

- Geothermal reserve estimate of 4,406.56 MWe
- Wind resources over 10,000 km² with 76,600 MW of potential installed capacity
- Hydro applications potential capacity of at 147 MW in Visayas
- Mini-hydro potential capacity of 1,784 MW from 888 sites
- Solar radiation nationwide an annual potential average of 5.0 - 5.1 kWh/m2/day
- Ricehull total potential of 277 MW
- Bagasse total potential of 236 MW
- Ocean energy resource potential capacity of about 170,000 MW

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 9367or the Biofuels Act of 2006



Biodiesel

- Production capacity @ 287 million liters
- Mandated 1% biodiesel blend in May 2007

Bioethanol

- Mandated 5% ethanol blend in 2009
- Voluntary 10% ethanol blend available in 105 Seaoil stations nationwide and 39 Shell stations in greater Manila area
- 5 Ethanol production plant projects endorsed and registered under BOI/IPP.

ALTERNATIVE FUELS

AutoLPG

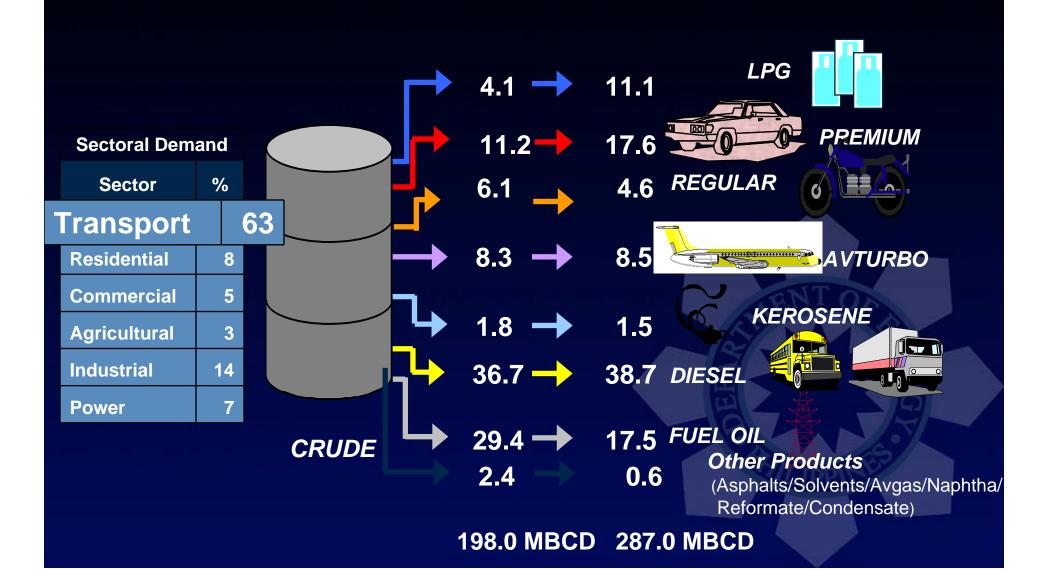
- 12,000 Auto-LPG taxis converted
- 19 government-accredited conversion shops operating nationwideCNG
- Inauguration of CNG Mother-Daughter stations in Batangas and Laguna in October 2007
- 22 CNG buses plying along Batangas-Laguna-Manila route
- Conducted Libreng Sakay of CNG buses: 24 March 06 April 2008



DOWNSTREAM OIL SECTOR No. of Players per Activity o Refining - 2 o Liquid Fuel Bulk Marketing - 87 o Fuel Retail Marketing - 738* SBDI MUNK * include 226 Ind. Gas Stations o LPG Bulk Marketing - 10 NATION LIQUI GAZ **PRYCE** o Terminalling - 5 **PETRONAS** o Bunkering - 19 Crude Total - 861 **Imports Product Imports** Refinery **Product Exports Refinery/Import/Export Terminal White Oil Pipeline Black Oil Pipeline** Tankers/Barges **Tank Truck Depot/Terminal Industrial Consumer / Tank Truck LPG** Retail

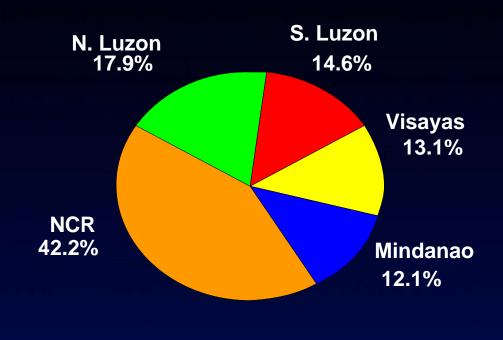
End User

PRODUCTION/DEMAND MIX FY 2007

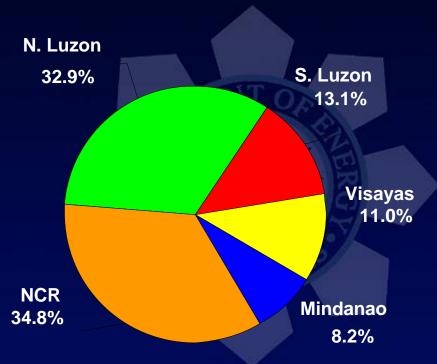


FY 2007 PETROLEUM PRODUCTS IN THE PHILS.

REGIONAL DEMAND SHARE (Total)

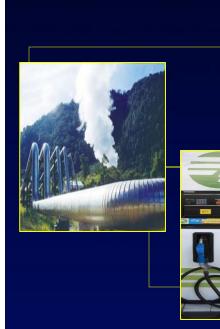


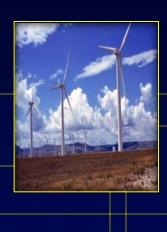
LPG SECTOR



Strategic Actions

of the Energy Sector











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

- 1. Ensure stable and quality supply of energy
 - 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
 - Maintain a competitive energy investment climate
- 2. Make energy prices reasonable and affordable
- 3. Implement social mobilization and monitoring mechanism



- 1. 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

- 1. Ensure stable and quality supply of energy
 - 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

1. Ensure stable and quality supply of energy

- 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



1. Ensure stable and quality supply of energy

- 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 2010
 - ✓ Continue implementation and expansion of coverage of the energy labeling of the Philippines
 - ✓ Advocate for the immediate passage of the Energy Conservation Bill





- 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













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

- Respond to high oil prices
 - ✓ Target expenditures schemes for pro-poor projects from oil tax collections such as subsidies on basic needs (food, shelter, education) for the rural and urban poor, small fisherfolk and farmers
 - ✓ Revisit taxation regime on petroleum crudes and products
 - Provide discounts to vulnerable sectors
 - Eradicate "Kotong and Kolorum" in the public transport sector

- 3. Implement social mobilization and monitoring mechanism
 - ✓ Strengthen the stakeholders participation in planning, implementation and monitoring of energy plans and programs
 - Adopt efficient use of energy as a way of life









