



*The Government of the  
Republic of the Philippines*



**Secretary Vincent S. Pérez, Jr.**

*Department of Energy*

*08 May 2002*



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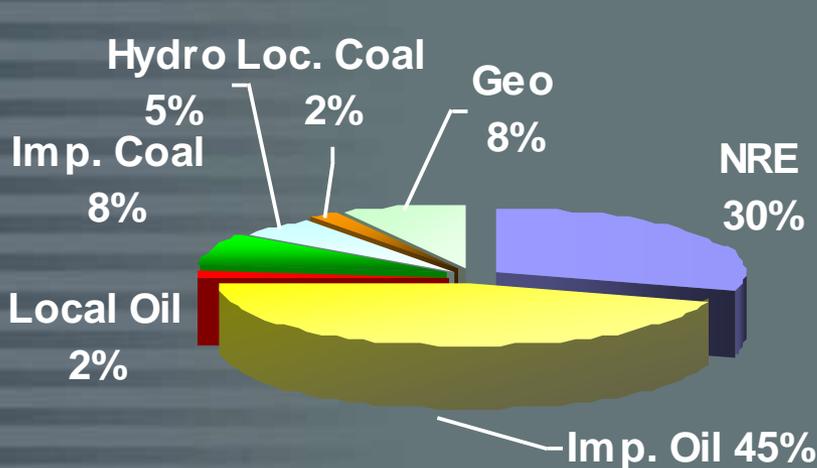
# 1. Overview of the Philippine Energy Sector



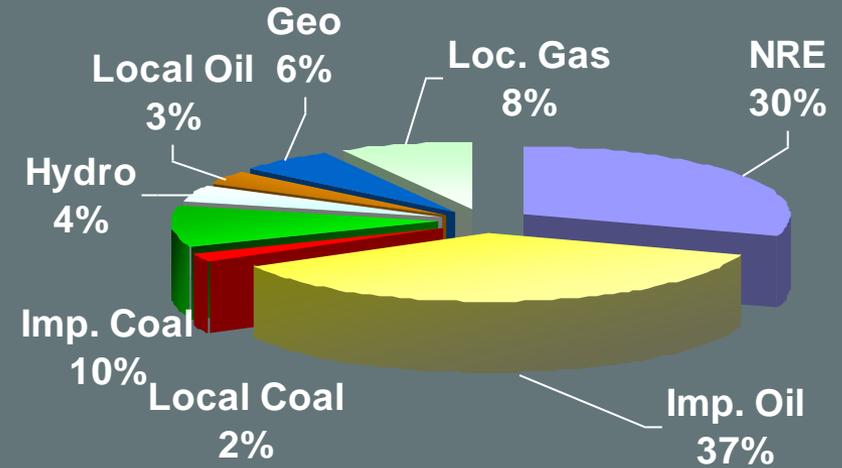
# Industry Background

## Overview of Philippine Energy Sector

### Primary Energy Mix Y2000



### Primary Energy Mix Y2002



**Total Energy: 243.4 MMBFOE**  
**Indigenous Energy Level: 45%**

**Total Energy: 266.9 MMBFOE**  
**Indigenous Energy Level: 52%**



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## 2. Energy Sector Development



# Energy Sector Developments

## *Malampaya Developments*

- Malampaya Deep Water-Gas-to-Power Project **now operational** supplying fuel to:
  - ◆ Ilijan (1,200 MW)
  - ◆ Sta. Rita (1,000 MW)
  - ◆ San Lorenzo (500 MW to commence 1<sup>st</sup> Q2002)
- Malampaya Oil Rim Find
  - ◆ Initially yield estimated at 8,000 barrels/day
  - ◆ After further testing yield estimate increased to **23,000 barrels/day**

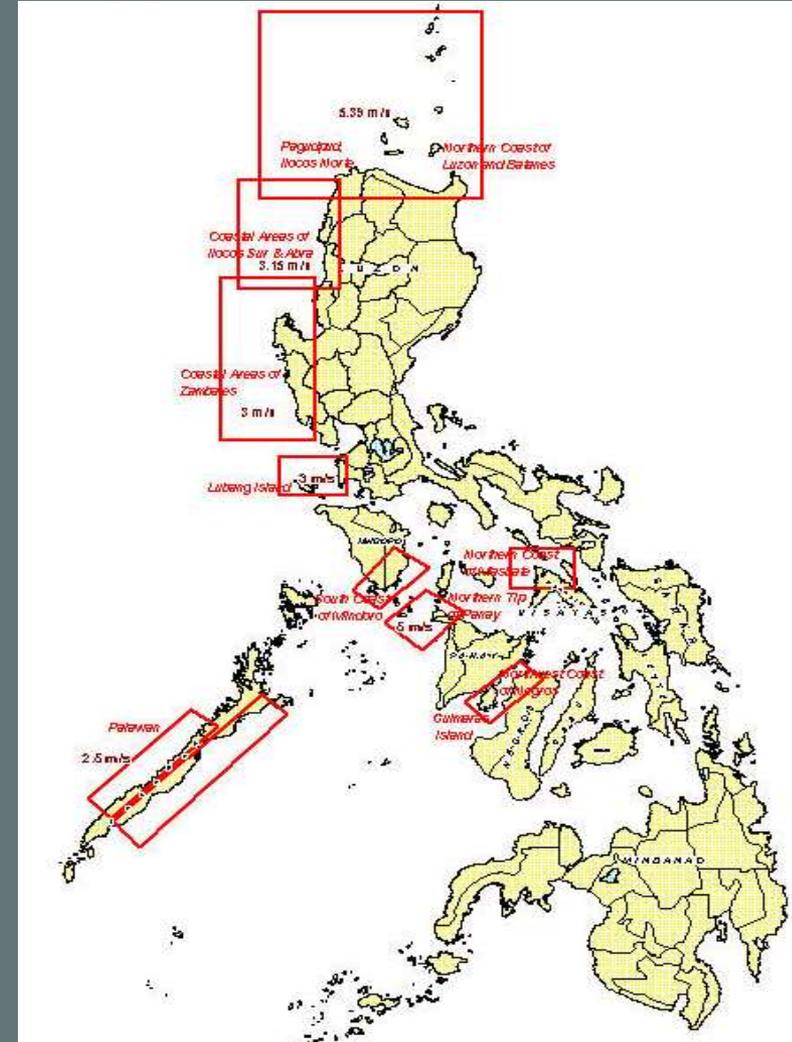




# Energy Sector Developments

## Wind Energy Potentials

- Potential development in **wind, solar and ocean energy**
- Philippine wind energy potential could be as much as **70,000 MW**
- Significant progress in wind farms:
  - ◆ **40MW** wind farm project in Burgos, Ilocos Norte
    - Project cost of US\$ 54 Million
  - ◆ **20 MW** wind power project in Bangui Bay, Ilocos funded by Danish Government Program





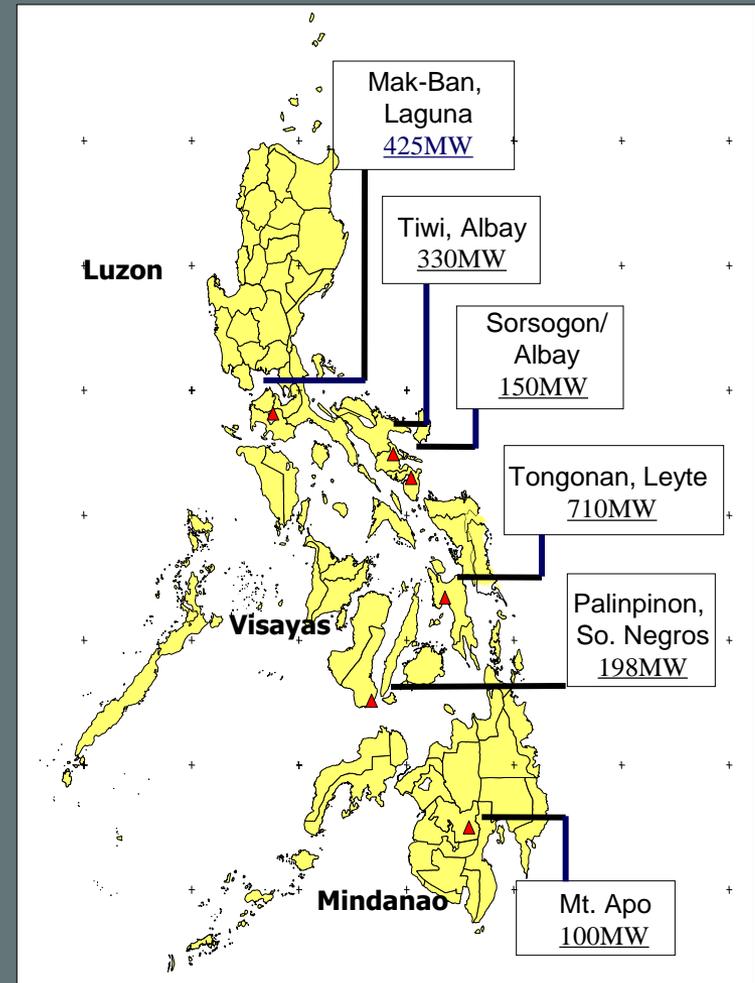
# Energy Sector Developments

## Geothermal Power

- Installed capacity of **1,931 MW**
- **2nd largest user of geothermal energy** resources for power generation
- Potential of **730 MW** from **11 explored** prospect areas



**Malitbog Facility in Leyte: Largest Geothermal Field in the World**

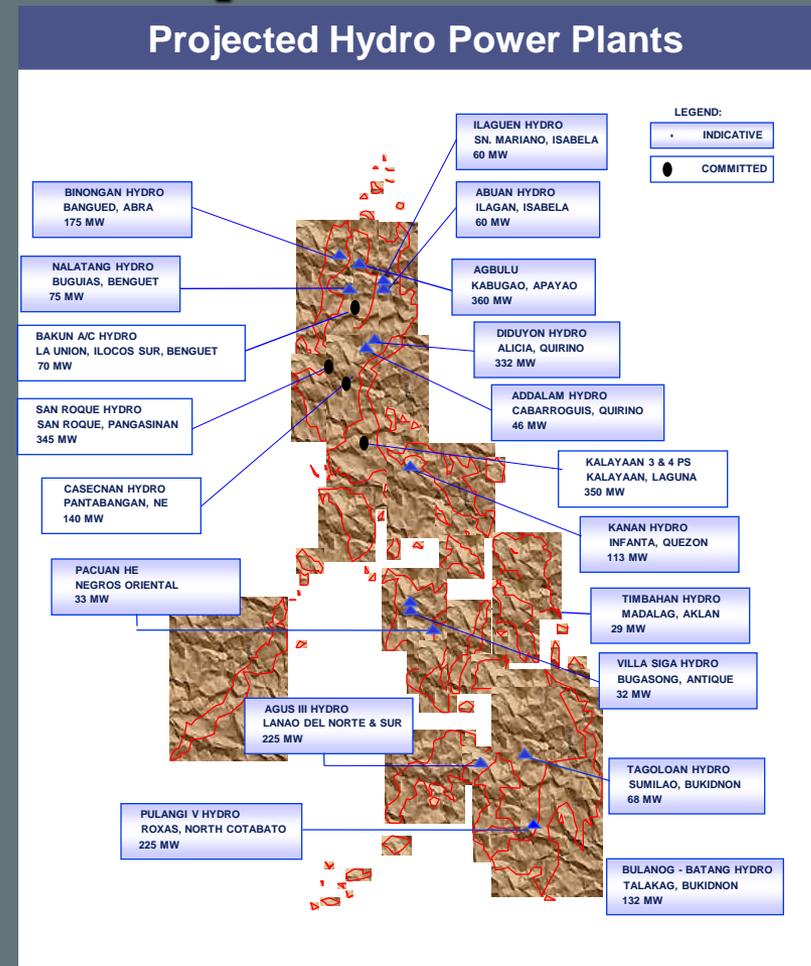




# Other Energy Sector Developments

## Hydropower Development

- Development of additional **1,299 MW** for the period 2002-2011
- Installed capacity anticipated to increase to **3,820 MW** by 2011



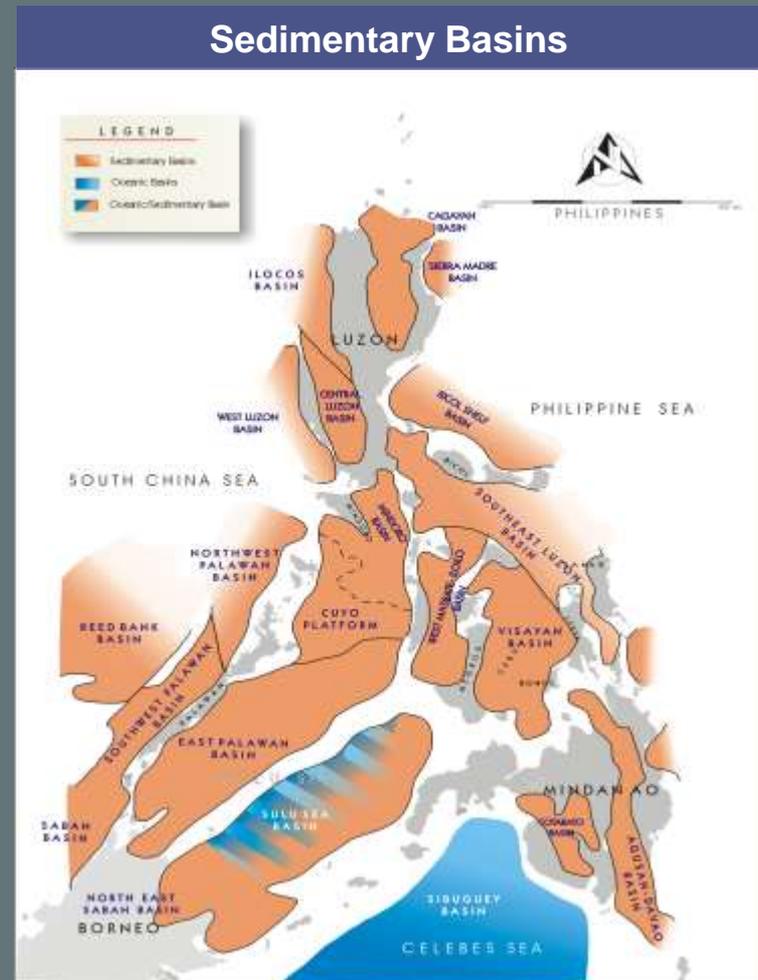
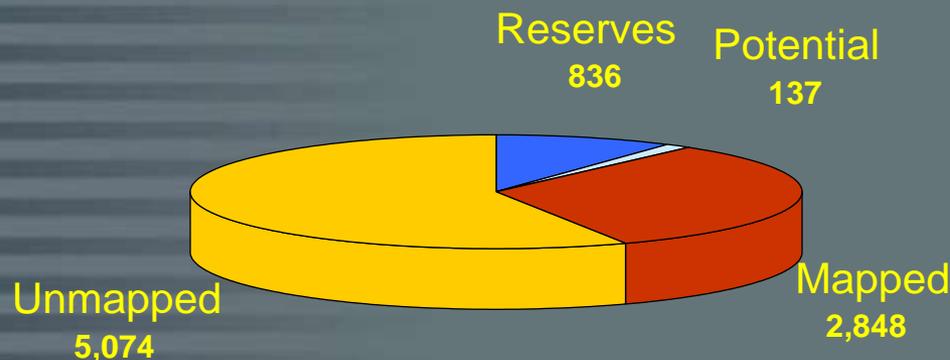


# Energy Sector Developments

## Vast Potential in Hydrocarbons

- Recent studies show **hydrocarbon resource potentials** larger than previously projected
- 16 sedimentary basins** representing an area of over **700,000 sq.km.**

Total Resources (million bbl o.e.)





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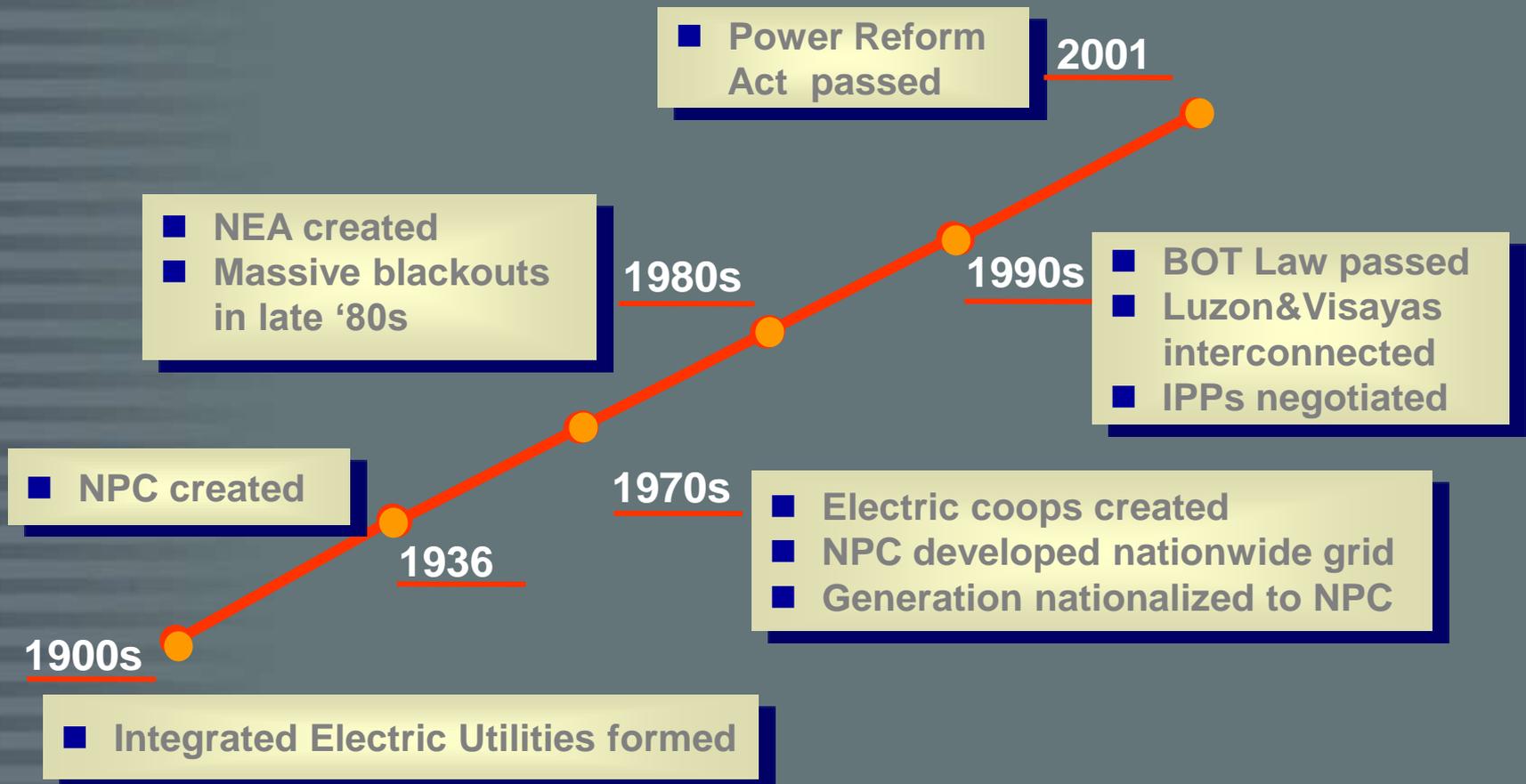


### 3. Electricity Sector Reform



# Electricity Sector Reform

## *Milestones in the Philippine Electricity Sector*





# Electricity Sector Reform

## *Evolution of the Electricity Industry*

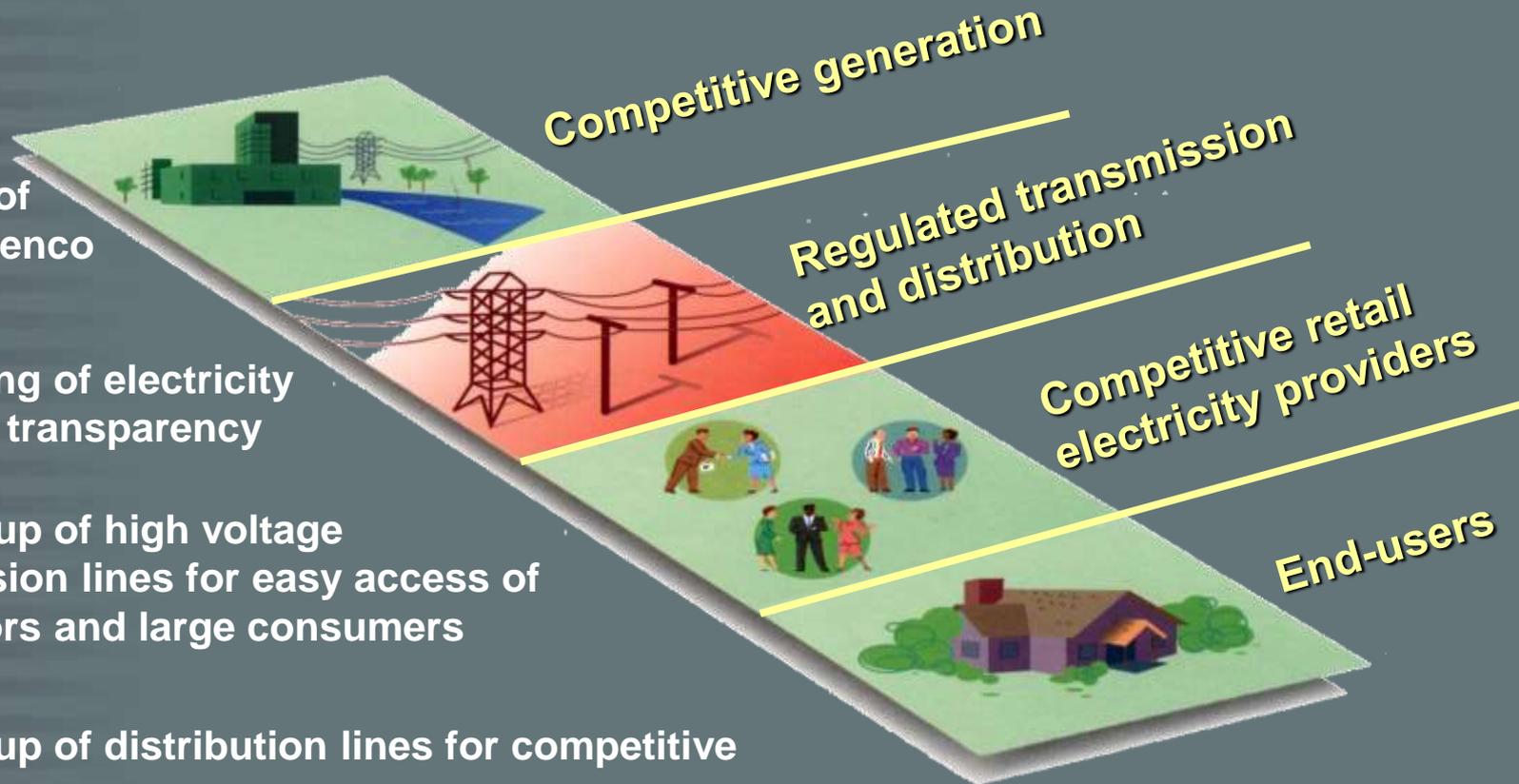
- ◆ Power Reform Act Effective June 26, 2001
- ◆ Provides for:
  - Privatization of the National Power Corporation (“NPC”)
  - Creation of Transmission Company (“TRANSCO”)
  - Creation of Power Sector Asset and Liabilities Management Corporation (“PSALM”)
  - Creation of Wholesale Electricity Spot Market (“WESM”)
- ◆ **Implementing Rules and Regulations (“IRR”) approved by the Joint Congressional Power Commission (“JCPC”)**



# Electricity Sector Reform

## *The New Electricity Industry Structure*

- Creation of several Genco clusters
- Unbundling of electricity tariffs for transparency
- Opening up of high voltage transmission lines for easy access of distributors and large consumers
- Opening up of distribution lines for competitive consumers





# Electricity Sector Reform

## EIRA Deadline

6 months

- ◆ Transfer NPC obligations to PSALM *subject to creditor consent*
- ◆ Transfer NPC transmission facilities and functions to TRANSCO
- ◆ PSALM submits privatization plans to JCPC
- ◆ JCPC approves IRR of EIRA
- ◆ JCPC endorsed privatization plan of TRANSCO

1 year

- ◆ Wholesale electricity spot market (WESM) to be established by DOE in consultation with industry participants
  - Draft WESM rules, consultation with industry participants
  - Funding and consultants being arranged

2 years

- ◆ Sale of sub-transmission assets to qualified distribution utilities
  - Work in hand to determine qualifications, commence negotiations

3 years

- ◆ 70% of capacity (NPC plants and IPPs) in Luzon and Visayas to be privatized



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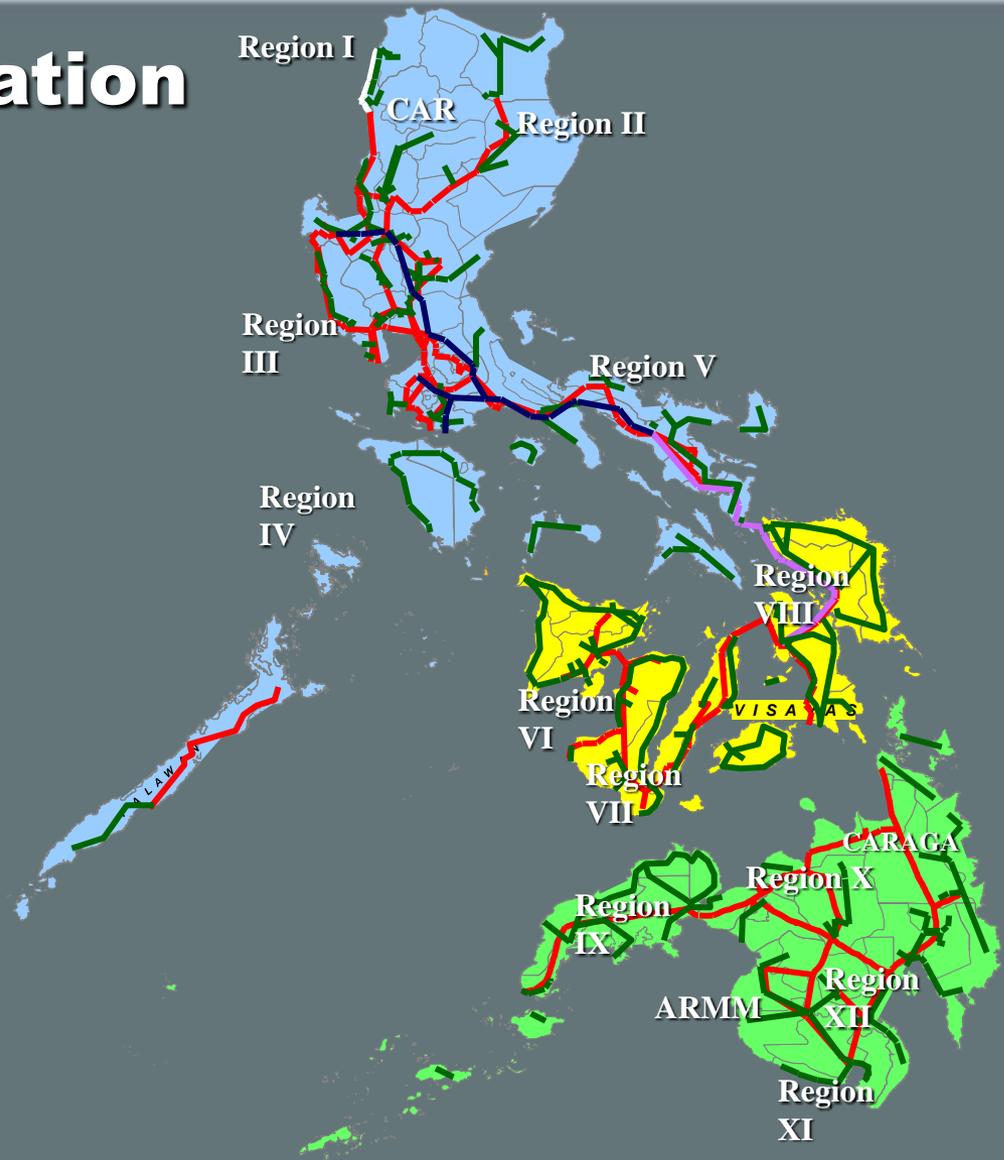


## 4. Privatization Process



# TRANSCO Privatization

## TRANSCO Assets





# TRANSCO Privatization

## *Pre-conditions for TRANSCO Privatization*

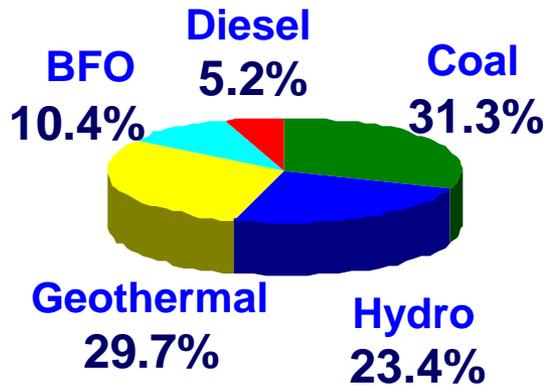
- ◆ Promulgation of IRR *Approved*
- ◆ Endorsement of Privatization Plan *Endorsed*
- ◆ Approval of WESM Rules as they relate to ancillary services *Industry consultation on-going*
- ◆ Approval of the TRANSCO tariff (and tariff regulation principles) *Application to ERC Dec 01*
- ◆ Preparation of draft Transmission Development Plan (CAPEX program) *2001 PDP under review*
- ◆ Segregation of sub-transmission assets *Almost complete*
- ◆ Resolution of franchise issues *Almost complete*



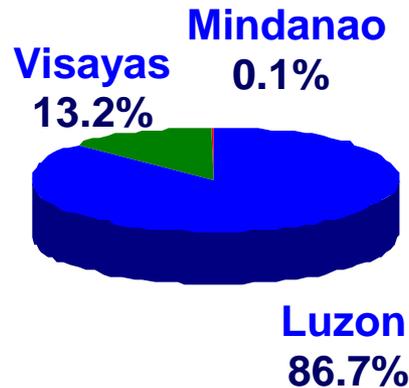
# NPC Privatization

## Installed Capacity (MW)

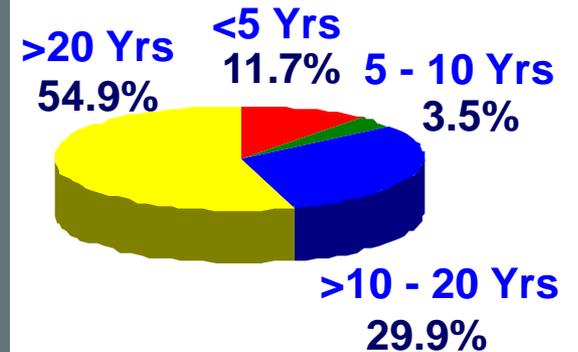
### By Fuel Type



### By Location



### By Useful Life





# GENCO Privatization

## *Pre-conditions for GENCO Privatization*

- ◆ Promulgation of IRR *Approved*
- ◆ Approval of Privatization Plan *Submitted*
- ◆ Approval of unbundled tariff and allocation of Transition Supply Contracts *Application to ERC Dec 01*
- ◆ Implementation and testing of WESM *Process underway*
- ◆ Appointment of initial IPP Administrators *Post WESM*

## PREPARATORY WORK IN HAND

- ◆ Development of WESM Rules (DOE with industry participants)
- ◆ Dispatch simulation modeling and sensitivity analysis



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## Lessons from Liberalization



## **Lessons from Energy Sector Liberalization**

- 1. Market reform benefits take time to be felt.**
- 2. Costs are front-loaded while benefits are back-ended.**
- 3. Market mechanisms difficult to explain and often misunderstood.**
- 4. Successful implementation requires an enlightened consuming public.**
- 5. Managing consumer expectation requires distinction between controllable and uncontrollable factors.**
- 6. Development of competitive markets requires deregulated environment.**



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***THANK YOU!***

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