

COUNTRY REPORT

Energy Policy Situation in Papua New Guinea

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Outline

- 1-PNG Energy Sector Overview, Organization & Practices
- 2-PNG Energy Sector Policies
- 3-Policy Difficulties & Bottlenecks
- 4-Expected Outcomes of this Course

1- PNG ENERGY SECTOR OVERVIEW, ORGANIZATION & PRACTICES

- **Institution with Policy Role over Energy Sector**
 - Department of Petroleum & Energy, constituted of two Divisions:
 - (1) Petroleum Division- focal role in development of country's hydrocarbon resource
 - (2) Energy Division- generic role in sectors other than oil and gas extraction
 - (3) Petroleum Division's role in policy is focused on oil and gas development
 - (4) Energy Division's role in policy is focused on overall national energy policy and subsector policies other than those for oil and gas

1- PNG ENERGY SECTOR OVERVIEW, ORGANIZATION & PRACTICES

- **Oil and Gas sector:**
 - (1) Extractive industry- governed by Oil & Gas Act of 1998 and its accompanying Regulation
 - (2) Service industry- oil products has two suppliers (InterOil & Mobil)
 - (3) InterOil operates only refinery in PNG to meet both domestic and offshore markets
 - (4) Mobil imports products to meet demand in PNG market
 - (5) InterOil's products are based on import-parity-pricing

1- PNG ENERGY SECTOR OVERVIEW, ORGANIZATION & PRACTICES

- **Electricity Industry:**
 - (1) PNG Power (PPL) - the corporatized state-owned-enterprise (SOE) operates in major markets/load centres and largely a monopolist
 - (2) Advent of new independent power producers in recent times is limited to two (2) entities
 - (3) Electricity industry is a regulated industry and PPL is a regulated entity under Independent Consumer and Competition Commission (ICCC) Act of 2002
 - (4) ICCC is regulator of this industry
 - (5) PPL has 10-year price path and exclusive supply (retail) areas under regulatory contract with ICCC which will lapse in 31 December 2011

1- PNG ENERGY SECTOR OVERVIEW, ORGANIZATION & PRACTICES

- **Rural electricity:**
 - (1) PPL, under its corporate charter withdrew from all rural electrification investments that cannot be profitable enough
 - (2) Approx. 90% of population live in rural areas, and have very limited access to electricity
 - (3) Electricity service facilities at rural district headquarters under provincial government's responsibilities are deteriorating

1- PNG ENERGY SECTOR OVERVIEW, ORGANIZATION & PRACTICES

- **Energy efficiency:**
 - (1) Energy efficiency is given very limited focus by the government- more focus is on generating energy to meet growing demand
 - (2) ADB began intervention in power sector efficiency in 2009- initiated power factor correction program with pilot project conducted in Port Moresby

1- PNG ENERGY SECTOR OVERVIEW, ORGANIZATION & PRACTICES

- **Renewable energies:**
 - (1) Hydropower constitutes just under 40 % of total power generation capacity in PNG. Vast potential remains untapped
 - (2) Solar thermal and photovoltaic applications are limited
 - (3) Wind energy is not currently being used, only trial projects ($\leq 80\text{kW}$) installed
 - (4) Biomass use is widespread in rural households. Only few agricultural industries use biomass
 - (5) Geothermal power has only one 55MW plant in mining enclave, built in 2006. Also the only CDM project in PNG.
 - (6) Potential for bio-fuel exists with surplus of potential raw materials, but the energy is not developed fully and used.

2 - PNG Overarching Policies & Energy Sector Policies

- **Medium Term Development Strategy (MTDS)**
 - (1) MTDS is the overall guiding framework for economic growth and social wellbeing for PNG
 - (2) Term of MTDS:2005-2010
 - (3) All sector policies to be aligned with the MTDS
 - (4) Energy is not captured as a priority under the MTDS

2 - PNG Overarching Policies & Energy Sector Policies

- **Vision 2050**
 - (1) November 2009, Government sets vision for development and prosperity, 2010-2050
- **Long Term Development Strategy**
 - (1) Government currently working on Long Term Development Strategy (LTDS) (2010-2030)
 - (2) LTDS finally recognizes and captures energy as a government priority for development

2 - PNG Overarching Policies & Energy Sector Policies

- **Petroleum policies:**
 - (1) Petroleum policies are under the oversight role of the Petroleum Division of DPE
- **Draft Electricity Industry Policy (EIP):**
 - (1) Objectives of EIP are to: improve reliability of electricity supplies, increase access to electricity by people, ensure electricity is affordable.
 - (2) Policy measure proposed: (1) state provisions for community service obligations, (2) appropriate regulation, (3) competition under various market-determined models, and (4) private-sector participation

2 - PNG Overarching Policies & Energy Sector Policies

- **Draft National Energy Policy (NEP):**
 - (1) Draft NEP remains incomplete since 2006
 - (2) Sets vision as “vibrant energy sector that improves quality of life and supports sustainable national development”
- **Draft Rural Electrification Policy (REP):**
 - (1) REP remains incomplete since 2006
 - (2) Objective of REP is to increase access to electricity for the rural population

2 - PNG Overarching Policies & Energy Sector Policies

- **Draft Geothermal Energy Resources Policy:**
 - (1) Government has engaged the services of a private consultant to develop a model for this policy
- **Policy on renewable energies:**
 - (1) A renewable energies policy is increasingly becoming necessary, and is driven by sectors in agriculture, forestry, and environment.

3-Policy difficulties and bottlenecks

- **Lack of capacity:**
 - (1) Energy Division lacks adequate manpower capacity, and skills and knowledge specific to policy development
- **Lack of government's focus:**
 - (1) Government's focus has never been on the energy sector, as shown in the MTDS
 - (2) There has also been a lack of political will to develop the energy sector
- **Lack of needed support:**
 - (1) Lack of focus by the government has resulted in a total lack of support (funding, political and administrative backing, capacity building, etc)

3-Policy difficulties and bottlenecks

- **Disarray in sector policy management:**
 - (1) An encroachment by the Department responsible for national planning matters (a central agency Department) on energy matters is creating a disarray in sector policy management
 - (2) Overlapping issues need proper and stringent delineation of responsibilities, such as between environment and energy, in renewable energies
 - (3) An encroachment by the National Planning Department also carries the feature of diverting funding and other support (for which this Department is the focal point) to itself.

3-Policy difficulties and bottlenecks

- **Lack of comprehensive data:**
 - (1) There is a lack of comprehensive data to support and inform the policy development process
 - (2) Lack in data is attributed to: (1) lack of adequate manpower, (2) continual lack of funding, (3) lack of policy for guidance, (4) insufficient skills and knowledge to carry out all tasks relating to data work.

4-Expected Outcomes of this Course

- **Capacity acquisition:**
 - (1) I expect that I will acquire the skills, insight, and knowledge necessary to facilitate and carry out policy development process and formulation policies that are a great need now for the energy sector in my country.
 - (2) This capacity should enable me to comfortably carry out the tasks set in our (Department's) work program for 2010 on development of various policies for the energy sector.
- **Experiences from Japan:**
 - (1) The course should provide me sufficient experience from Japan that I can take home and refer to in my work on energy policy.



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