



DEPARTMENT OF PETROLEUM AND ENERGY

PAPUA NEW GUINEA:



ENERGY DEMAND, SUPPLY AND FUTURE OUTLOOK IN PNG

Prepared and Presented by: WAREA UNDI

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TOKYO PRINCE HOTEL**



Department of Petroleum and Energy

PRESENTATION OUTLINE

1. **COUNTRY INTRODUCTION.....**
2. **BACKGROUND INFORMATION ON ENERGY SECTOR.**
3. **ENERGY EFFICIENCY AND REGULATION**
4. **KEY ENERGY EFFICIENCY STAKE HOLDERS**
5. **THE OIL AND GAS INDUSTRY/PETROLEUM PRODUCTS**
6. **THE POWER INDUSTRY**
7. **a) Electricity Supply**
8. **B) Electricity Demand**
9. **FUTURE OUTLOOK**



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COUNTRY INTRODUCTION

Where is Papua New Guinea ?



Here

east of Indonesia,
north of Australia

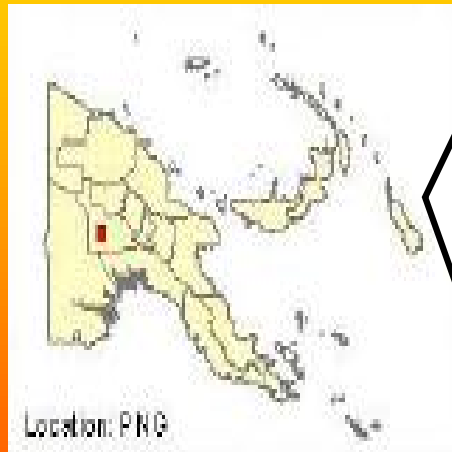




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COUNTRY INTRODUCTION.CONT...

Biogeography ,Social,Economic and Political Setting



- "Total Land Area=460,000sq km
- "Largest Island in the Pacific
- "Tropical Climate
- "Biodiversity ranking=ranked within 20 of world's richest
- "Rainfall= Max of 8800mm/a and min of 1150 mm/a
- "Temperature= 20-32.5 degree Celsius
- "Capital City=Port Moresby
- "City population =300,000
- "Country population =more than 6.5 million(2005)
- "Independent from Australia in 1975
- " System of government= Parliamentary Democracy
- "Member of commonwealth nations
- "Economy dependent on Primary production
- "Natural resources (Gold,Copper, Oil, Fish, Timber)
- "Main export Earner(Petroleum and Mineral Export)
- "Languages: More than 800 but English is formal
- "Race= Melanesian(dark skin people)
- "Currency= Kina (1 Kina = 0.36 USD)



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INTRODUCING MY ORGANISATION

DEPARTMENT OF PETROLEUM AND ENERGY

The Department of Petroleum and Energy (DPE), is PNG's government agency or Ministry responsible for regulatory activities relating to oil and gas development and renewable energy research and development.

It was established by an Act of Parliament in 1998.



ENERGY SECTOR

- Primary energy supply is expected to double
- Increase @ 6% from 2.4Mtoe in 2011 . 9.3Mtoe in 2030
- Demand of oil concentrated in extractive industry, electricity and transport



ENERGY EFFICIENCY AND REGULATION

- ED-DPE responsible for energy policies, planning initiatives, data collection and analysis
- Final draft for Electricity industry before NEC for approval
- Geothermal policy in draft stages
- Prices of electricity determined by ICCC
- DPE-ED responsible for technical regulation of generation, transmission and distribution of electricity



KEY ENERGY EFFICIENCY AND STAKEHOLDERS

- ED . DPE
- PPL
- DEC
- ICCC

- Data analysis
- Under resourced



THE OIL AND GAS INDUSTRY / PETROLEUM PRODUCTS

- Crude oil decline 30,000bbls/d
- 80% crude exported, 20% local refinery
- Associated gas + gas finds underpinned PNG LNG project
- PNG LNG Export 2013
- Refinery commissioned 2004
- Refinery capacity 30,000bbls/d
- 90% locally consumed, 10% exported
- Refinery company has monopoly over Petroleum products



THE POWER INDUSTRY

a) Power Supply

- PNG capacity, 547MW, 40% Hydro, 38% thermal, 2008
- Total installed capacity nationwide 295 MW PPL, 148MW Hydro (50%), 137 MW thermal (40%). Rest of MW mining, manufacturing
- 3 urban grids, Port Moresby, Ramu and Gazelle



THE POWER INDUSTRY

- b) Demand
- 1.4mill households, 10% metro & urban, 90% rural
- 2009, 78,014 domestic customers within PPL networks



RENEWABLE ENERGY SOURCE

- Biomass
- Geothermal
- Solar
- wind



FUTURE POSITIVE OUTLOOK

- Ramu Grid upgrade
- Rural electrification roll out program
- Replacement of old generators
- Preliminary discussions with Indonesia for electricity
- Preliminary , feasibility studies undertaken for 3 more hydro power stations



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THANK YOU