



# About Papua New Guinea

Presented By Samuel Petau



**Country:** Papua New Guinea (PNG)  
**Capital City:** Port Moresby  
**Region:** Oceania (Polynesia, Micronesia, Melanesia)  
**Languages:** English (for business), Pidgin, Motu & 800 others  
**Population:** Population of Papua New Guinea (2017 and historical)

Year	Population	Yearly % Change
2016	7,776,115	2.06 %
2015	7,619,321	2.16 %
2010	6,847,517	2.38 %
2005	6,086,905	2.52 %

Source: [www.worldometers.info/world-population/papua-new-guinea-population/](http://www.worldometers.info/world-population/papua-new-guinea-population/)



# Current Energy Policy and Measures

ENERGY POLICY DEVELOPED DURING 2015-2016

## POLICY GOAL

“to ensure affordable, reliable, competitive, sustainable and environmentally friendly supply of energy by developing the nation’s indigenous resources to grow the economy and improve the quality of life for all citizens”.

### The PNG National Energy Policy explains:

- i. The reasons why PNG needs a National Energy Policy.
- ii. The role of energy as an engine of growth in the national economy.
- iii. The legal and regulatory framework and proposed institutional arrangements.
- iv. The overview of the hydrocarbon (upstream, midstream and downstream) and renewable energy sectors, highlighting the challenges and the proposed strategies to develop these sectors;
- v. The transportation fuels sector and its role to propel economic growth.
- vi. The overview of the electricity industry and the challenges facing electric power generation, transmission and distribution and strategies to reform and rejuvenate the electricity industry.
- vii. The importance of creating an enabling environment for indigenous participation in the energy sector developments.
- viii. The energy financing, trading and the proposed tariff and pricing mechanism;
- ix. The energy efficiency, conservation and land, environment, health and safety and;
- x. The proposed institutional arrangements and new institutional structure.



## **PNG'S AGENDA ON ENERGY**

### **PNG'S VISION 2050**

By 2050 PNG's economy should attain 100% power supply from renewable and sustainable energy sources.

Reduce greenhouse emission by 90 percent to 1990 levels;

### **PNG STRATEGIC DEVELOPMENT PLAN 2010- 2030**

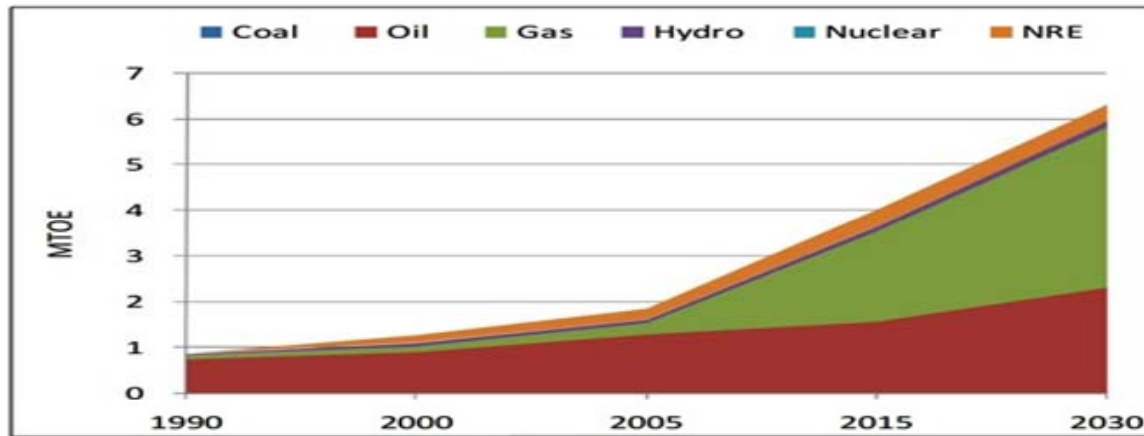
By year 2030, 70% of the country's household will have access to electricity.

### **PNG NATIONAL SUSTAINABLE AND RENEWABLE DEVELOPMENT STRATEGY.**

Promote Green Energy Investment in the renewable resources sector;

## Energy Demand and Supply

FIGURE 1 - PRIMARY ENERGY SUPPLY IN PNG

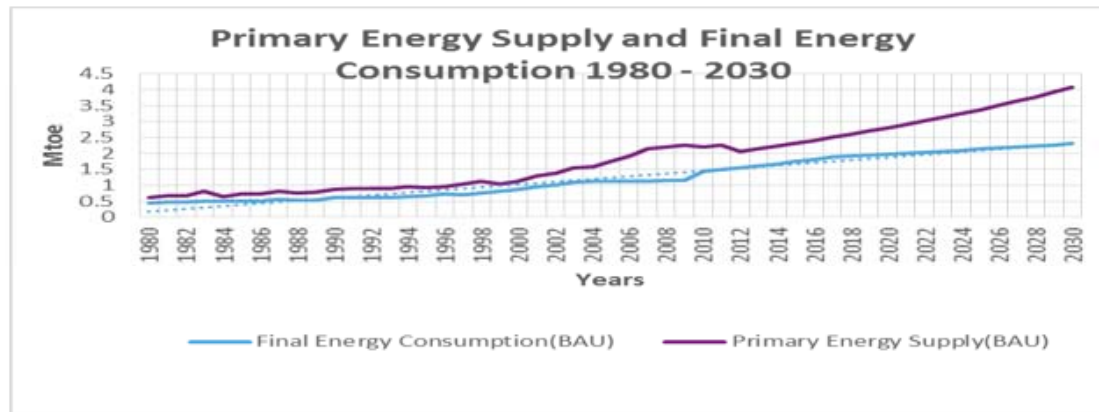


Source: APEC (2009)

The main factor in determining the energy demand, particularly in developing countries like Papua New Guinea is the economic growth. Programs, projects and institutional reforms outlined in the National Energy Plan (2016 - 2020) will be carried out consistent with the economic objectives as stipulated under the Medium Term Development Strategic Plan 2 (MTDS) (2015 - 2017).

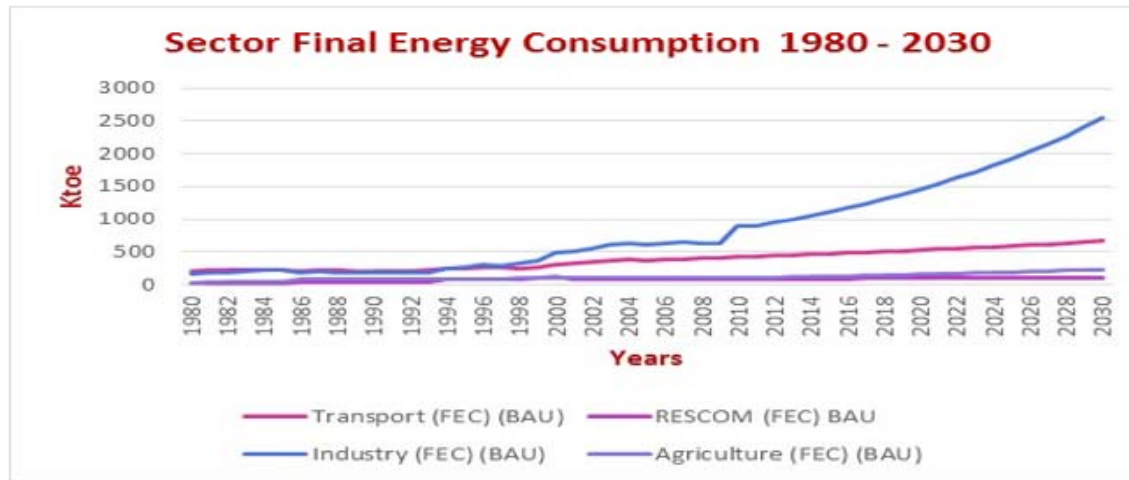


FIGURE 2 – PRIMARY ENERGY SUPPLY AND FINAL ENERGY CONSUMPTION



Source: APEC Energy Statistics and forecast by National Energy Policy Task Force, 2015.

FIGURE 3 – SECTOR FEC 1980 - 2030



Source: APEC Energy Statistics & Forecast by National Energy Policy Task Force, 2015.



# Outlook of Energy Demand

- ▶ Increases in population is resulting in increasing demand for energy consumption.
- ▶ Despite the global economic downturn there are indications that demand for energy in Papua New guinea will continue to grow.
- ▶ Recently there is an increase in the solar related energy being consumed by the rural population. This is being experienced in areas that do not have access to electricity supplied by the country's three main grids.
- ▶ There is a greater demand for energy and the demand will still increase in the years to come.

# Outlook of Energy Supply

## Undeveloped Hydrocarbons

- ▶ Papua New Guinea has more natural gas identified to be developed in the near future.
- ▶ Papua New Guinea has developed and started exporting LNG. There is significant amount of gas identified under review for commercialisation.
- ▶ Most of the oil and gas being extracted in the country are being exported .
- ▶ Policies are needed to meet the increasing demand from the locally extracted oil and gas at an affordable price.



# Outlook of Energy Demand and Supply

## - Supply-

- ▶ Papua New Guinea is predominantly a subsistence base economy. Most population is found in the rural areas. Here wood is used more as source of energy.
- ▶ 50 % of Energy in terms of electricity is supplied from Hydropower and are operated in isolation by state owned entity, PNG Power. Diesel operated thermal power plants, gas and geothermal energy plants provide the rest. Demand far outweighs the supply.
- ▶ PNG has resources to increase the capacity of energy supply within the country. Some of the potential sources of energy that are yet to be fully developed are: Solar, Wind, Tidal Waves (Ocean Current), Biomass, Geothermal and Gas.



## Major issues and difficulties in Formulating Energy Policy

- Structural Reform of the Energy Sector
- Energy Investment & Financing
- Political Will and Support
- Bureaucratic Red Tape
- Duplication of roles within the government agencies



~Thank you~