09 Oct 2018

Rural Electrification in Kiribati

Energy Planning Unit
Ministry of Infrastructure and Sustainable Energy

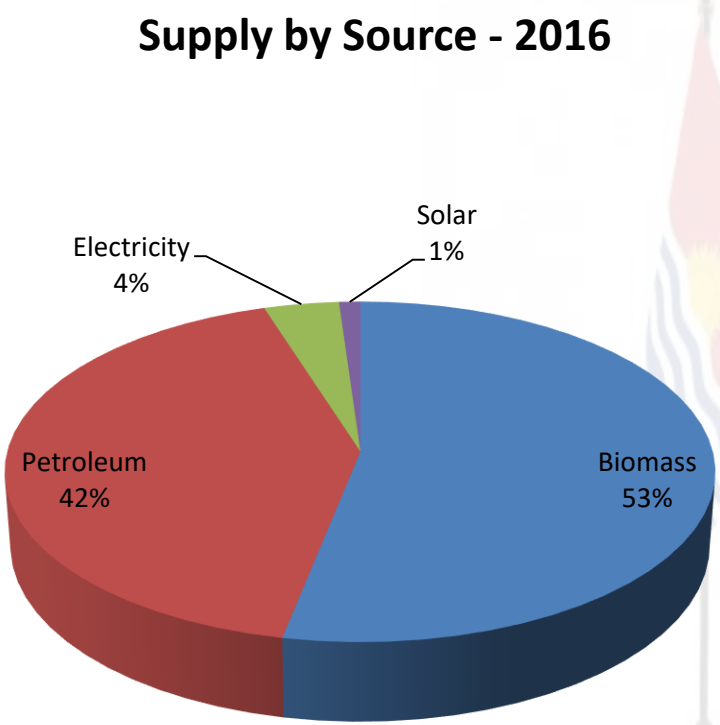
What to cover..

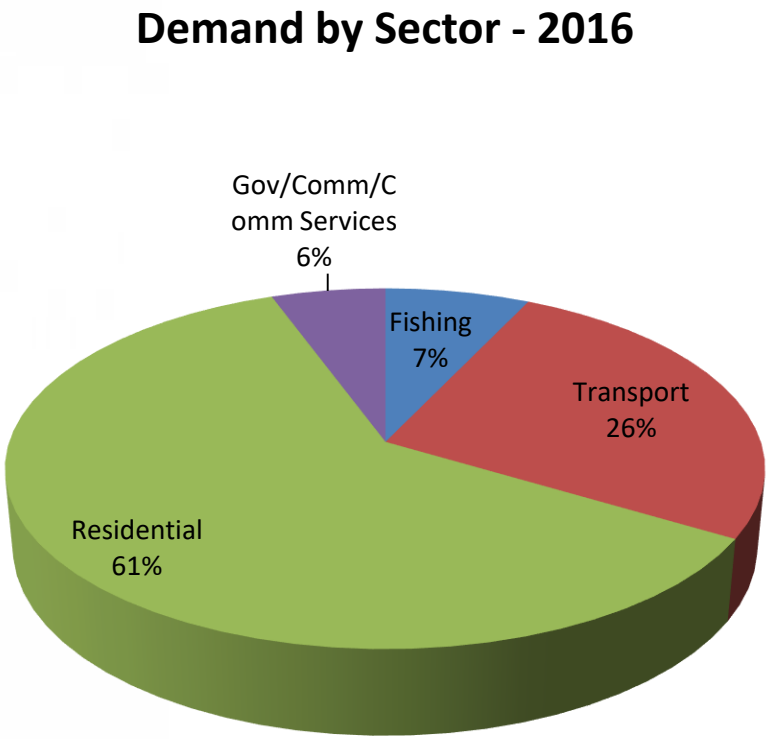
- Background
- Energy Overview
- National Energy Targets
- National energy efficiency programme
- KNEP, KIER, INDC
- Outer Islands and Rural Electrification
- Opportunity for Private Entrepreneurs

Background

- High dependency on petroleum imports
- High dependency on external funding supports for energy developments

Energy Overview





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National Energy Targets

- National fossil fuel reduction target (electricity) by the year 2025

South Tarawa 45%	Kiritimati 60%	Rural Public & Private Communities 100%	Rural Public Infrastructure 60%
• EE 22% & RE 23% • PUB Grid Coverage	• EE 20% & RE 40% • Central Grids (2 Corridors)	• RE 100% • Boarding Schools, Island Councils, Private Amenities & Households	• EE 20% & RE 40% • Southern Kiribati Hospital & Ice Plants

National energy efficiency programme

- Heavily reliance on imported petroleum coupled with increase demand and **inefficient appliances** and equipment warrants an optimal use of available energy sources.

- Development of **Minimum Energy Performance Standards and Labeling** (MEPSL) Regulation under the PALS initiative.

National energy efficiency programme

- **MEPSL** specify the **minimum** level of **energy performance** that appliances, lighting and electrical equipment must meet or exceed before they can be offered for sale or used for commercial purposes.

- Inefficient products are prevented from entering the marketplace, and manufacturers are given appropriate signals to increase product efficiency.

- For consumers, **MEPSL** mean that products available in the market **use less energy** and have **lower running costs** over their lifetime.

National energy efficiency programme

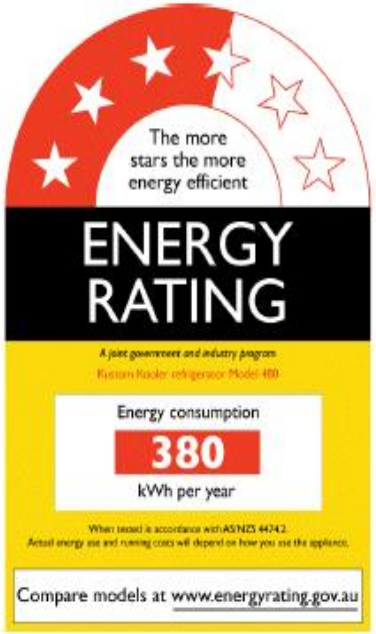
Energy Labels

- When people buy appliances they buy an energy service in two parts:
  - They can see the appliance, and its cost.
  - They cannot see the energy consumed, or it running costs
- Labels helps consumers understand which products have the lowest total cost during the purchase process.
- Attached to an appliance when it is displayed for sale.

National energy efficiency programme

- What can be done to increase the levels of energy efficiency

Regulation **Information** **Incentives**



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KNEP, KIER & INDC

- A guideline and implementing tools for energy activities.

Outer Islands and rural electrification

- Given 58% of the households reside in Kiribati, 30% have access to electricity
- Mostly stand-alone solar PV home systems.
- Having limited AC power, restricted to small generators for part-time use.
- Petroleum products at times are not reliably and safely available and at affordable price with respect to income.
- This is **WHY** the **PV** is flourished there.

RE & EE Projects

- Number of on-going RE & EE projects and future projects
- Feedback and benefits from the communities
- Opportunities for private sectors.

Opportunities for Private Sectors

- Benefits from RE technology in outer islands.
- Enforcing MEPSL Regulations will involve Private sectors
- Tax reduction and tariff feed-in structure for Renewable energy technologies
- Achieving renewable energy national electrification goal in the future.
- Collaboration works in promoting RE&EE to enhance the livelihood for I-Kiribati.

Kam rabwa

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