IEEJ: May 2012

#### The Cook Islands

**Energy Policies** 





#### Rakahanga Pukapuka Mar

Nassau



#### Cook Islands

Manihiki

Palmerston .

Aitutaki Manuae Mitiaro Takutea Mitiaro Atiu Mauke

<u>Rarotonga</u> 🥧



#### Location in the world

- The Cook Islands is located in the Pacific, to the east of Samoa, Niue and Tonga, south of Kiribati;
- There are 15 islands, 13 are habited and all islands are fully electrified;
- 12 islands have diesel generators so our dependence on diesel, an imported product is high;
- Our economy is slowing down like everyone else's, our GDP per capita is USD\$12.5



#### Our environment

- Our environment is beautiful and prestine as compared to today's standards
- We have plans to keep it that way by changing the way we generate electricity
- Our carbon emission into the atmosphere is high compared to other Pacific nations.
- Of the total number of oil we import, 47% is used in the transport sector, 30% for aviation and 27% for electricity generation.





## Current Energy Policies

- Overarching policies (focus on RE)
  - Te Atamoa o te uira natura
- The Cook Islands Electricity Chart
- It explains our direction and policy target;
- The Cook Islands Renewable Electricity Implementation Plan
- Explains how we will achieve our target;
- The Island Specific Plan
- Describes what we will do for each island given their different needs.

### Electricity demand and supply (nth)

Island	Household	Population	Demand	Project cost
Rakahanga	24	140	18	\$1.1m
Pukapuka	97	510	35	\$2.4m
Nassau	32	120	10	\$0.35m
Suwarrow	1	2	2	\$0.04m
Manihiki	97	370	30	\$2.50m
Penrhyn	66	260	50	\$2.50m

### Electricity demand and supply (sth)

Island	Household	s Population	Peak Demand	Project cost
Palmerston	18	60	8kw	\$0.35m
Mitiaro	145	220	39kw	\$1.50m
Mangaia	177	640	120kw	\$3.50m
Atiu	158	570	100kw	\$3.20m
Mauke	106	390	90kw	\$4m
Aitutaki	535	2,250	620kw	\$8m
Rarotonga	3,009	13,900	6MW	\$200m

# Future Electricity demand and supply

For the outer islands:

Energy Efficiency program to control demand of electricity;

Uncertain on population growth.

For Rarotonga:

Energy Efficiency program to control demand of electricity;

Net metering policy affect demand and supply; Uncertain on population growth.

# Challenges in energy policy development

- The more isolated the island, the more chance data will be absent;
- Lack of knowledge, and consequent confidence in renewables;
- Lack of experts to provide technical advise in renewables;
- Land are tribally owned

## Policy issues for consideration

- Policy on Private sector Investment;
- Policy on Tariff (given renewables);
- Policy on outer islands power sector governance;
- Policy on the economic viability using renewables in the Cook Islands;
- Policy on demand side management;

# Arigato (meitaki maata)

