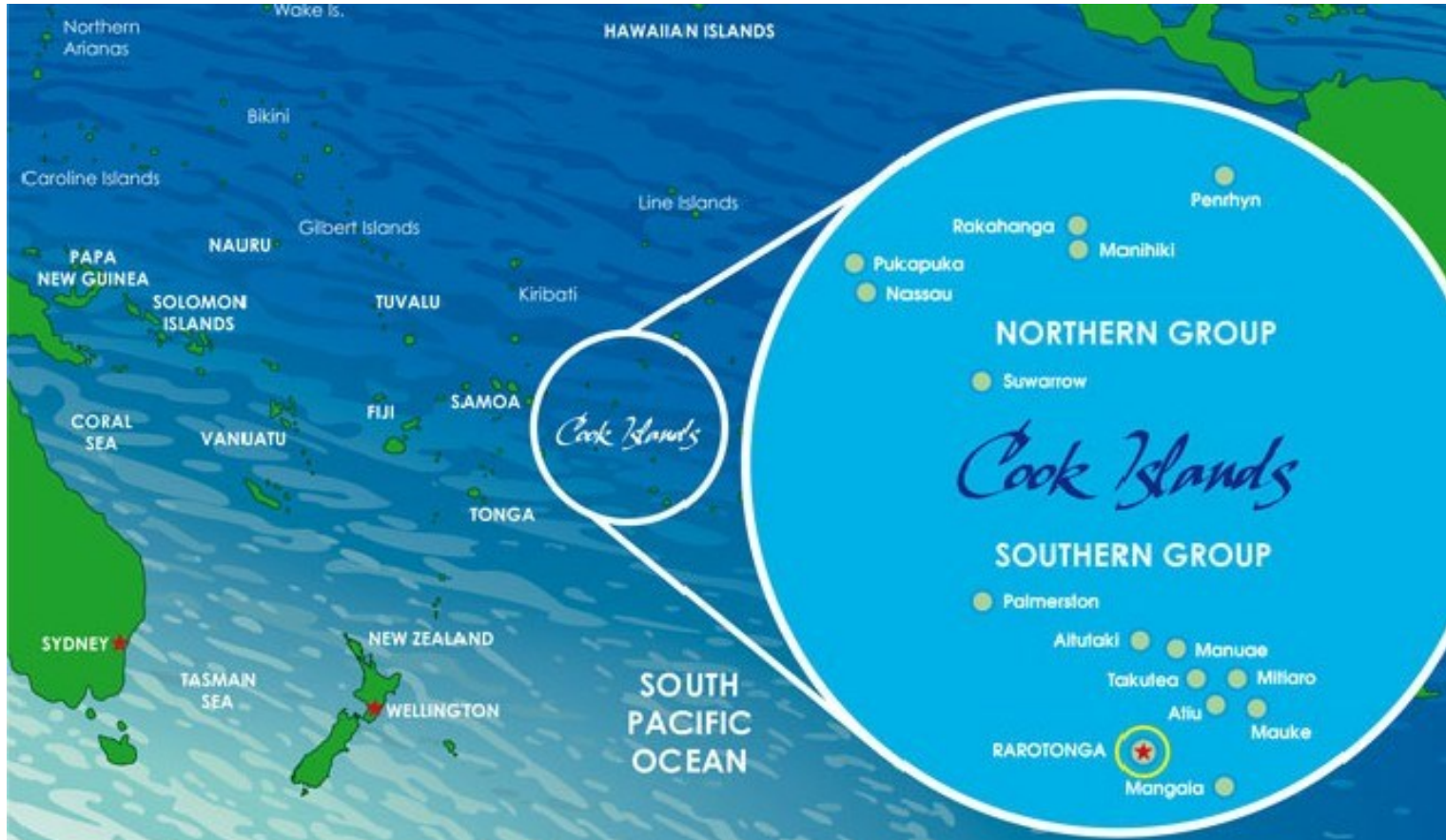


# Introduction



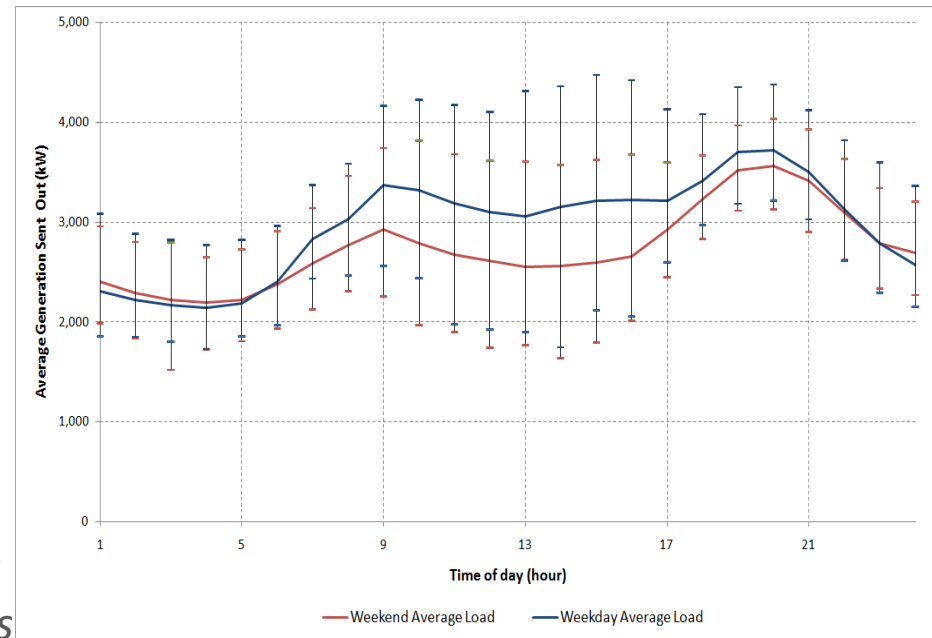
# Introduction

- *TAU is a Government owned power utility responsible for electricity supply on Rarotonga*
- *Customer base  $\approx$  5,000; Electricity consumption  $\approx$  27GWh/yr*
- *12MW Diesel Power Station; 8 gensets ranging from 0.8MW to 2.7MW*
- *Net-metering policy in 2009*
- *National Renewable Energy Goal - to meet 100% electricity needs from RE sources, by 2020*



# Energy Issues

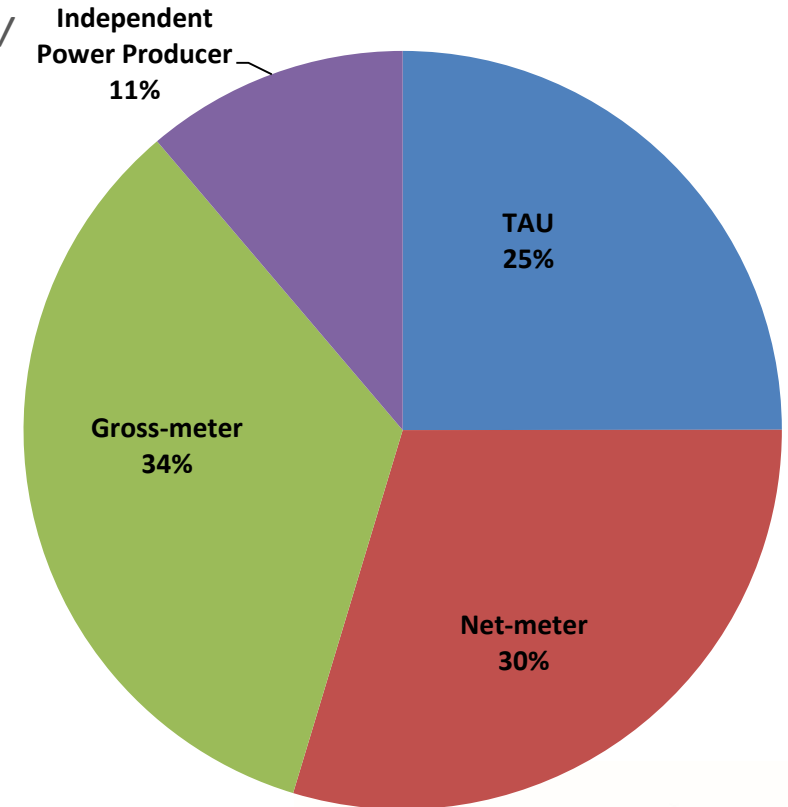
- *The approach up to now*
  - *Unconstrained Private DG connections*
  - *Incentivised RE connections*
- *Challenge*
  - *Intermittent*
  - *Non-dispatchable*
  - *Integration*
  - *Other*
- *Going forward*
  - *Diesel Power Plant Upgrade*
  - *Battery Energy Storage Systems*
  - *Other renewable energy sources*
    - *Wind*
    - *Biodiesel*
  - *Pumped Hydroelectric Storage*



# Renewable Energy Integration Success Stories

## Installed Distributed RE Generation

- *Grid connected RE in October 2016 = 3,450kW*
  - *20% Contribution*
  - *Total 437 individual systems*
- *TAU projects*
  - *Diesel Plant Automation*
  - *Solar PV Projects*
  - *SCADA*
  - *BESS*



# Thankyou

*Tama Heather*

*Te Aponga Uira*

*Rarotonga, Cook Islands*

*+682 20054*

[tamaheather@electricity.co.ck](mailto:tamaheather@electricity.co.ck)

