Tonga. The True South Pacific.

experience True Adventure www.thekingdomoftonga.com
Overview
Tourism Sector

- Tourism has been identified by successive Governments, private sector, and communities as the Major economic development opportunity;
  - With potential to provide broad based employment
  - More Income generation opportunities
  - Support retention of cultural traditions
  - Sustainable management of the nation’s environmental assets.

- Tourism sector in Tonga has failed to grow at the same pace as many neighbouring countries.

- Tonga is currently ranked 9th out of the 15 South Pacific countries in terms of visitor arrivals.
Overview
Tourism Sector

176 Islands, One Kingdom
www.tongaholiday.com
Overview
Tourism Sector

- With GDP, Tourism contributed 20\% of National GDP
- Nevertheless, major development endeavours and attempts to develop a clear way forward for the future growth of the Sector. Eg. Tonga Toursim Sector Roadmap.
- Tourism Sector Framework is presented to establish the strategic vision and high level goals and objectives for the Sector.
- It also identifies for Government to support a conducive enabling environment that enhances investment and growth;
  ‘Government to encourage investment in tourism by addressing issues and impediments to the industry as identified by other stakeholders.’
"Off Grid Power Supply"

Case study 1
Fafa Island Resort, 18 acres atoll, located 15-25 minutes by small boat from Nuku’alofa.

A small but delightful Resort with only 13 traditional bungalows OR Tongan fales

Fafa Island Resor now possesses the biggest single solar electrical plant in Tonga.

Resort now is 100% self-sustainable for electrical power enabling it to be self-sufficient
TONGA FAFA ISLAND RESORT

“Off Grid Power Supply”

• Initially runs by 48 solar panels

• recently extended with another 22 panels, a total of 70 Solar Panels
TONGA FAFA ISLAND RESORT

“Off Grid Power Supply”
RE Applications:
- Power grid integration
- Desalination
- Proposal for a small wind turbine to add up the system for longer cloudy periods.
TONGA FAFA ISLAND RESORT

“Off Grid Power Supply”

- Off Grid Power Supply (15.2kWp) – designed and installed by a German consultant and supported by two well known German companies SMA & Kirchner Solar Group based in Kassel.

- A move to clean power – it was long cherished dream come true for Owners of the Resort, Josefa and Rainer (Resorts co=owners).

- Forefront of eco-tourism, have developed a system that can also be an example for village and tourism developments throughout the Pacific – esp. in the outer islands.
‘UTU’ONE B&B
MA’UFANGA
Case study 2
‘UTU’ONE B&B

“50% Grid Power Supply”
‘UTU’ONE B&B
“50% Grid Power Supply”

- A 9 room Bed & Breakfast, 50% Grid Power Supply, located along waterfront Vuna Rd of Nuku’alofa
- Type of Renewable Technology – Solar photovoltaic electricity (PV)
- Size of the Renewable System – 20%
- 42 Solar Panels
- Occupancy rate (65%)
- Off grid power supply only during Day-time
‘UTU’ONE B&B

“50% Grid Power Supply”
‘UTU’ONE B&B
“50% Grid Power Supply”

- System is Pre-set to automatically switches to TPL Power if not enough energy is collected.
CHALLENGES & RISKS

- **Financial challenges**
  whole system, personnel and equipments (solar panels and batteries) required for installation are expensive.

- **Political issues behind the scene**
  TPL is a Government business, run by Board of Directors (partly consent with movement to 100% displacement of power generation by diesel fuel). A big impact on annual dividend provided to Government.

- **Limited technical experts/consultants available locally**

- **Batteries run out earlier than expected**
TERM (Tonga Energy RoadMap) Plan
To provide a clear direction on how RE and Energy efficiency projects will be resourced, implemented and monitored.

- 4 strategic priority areas involved with TERM Plan;
  - (Supply efficiency) Efficiency of conversion of petroleum to electricity
  - (Demand efficiency) efficiency of conversion of electricity into consumer electricity services)
  - Displacement of Power generations by diesel fuel
  - Displacement of Power generations by other RE sources and extending to RE to remote areas.
Malo ‘Aupito