Donor country

New Zealand

Project/programme title

Loss Reduction Project: Tuvalu

Purpose

To help the Tuvalu Electricity Corporation (TEC) provide a higher quality of electricity services at lowest cost to consumers.

Recipient country	Sector	Total funding	Years in operation
Tuvalu	Energy	NZ\$138,500	November 2007 –
			June 2009

Description

In 2007, energy ministers from the Pacific region met in Rarotonga, Cook Islands, to discuss energy issues facing the region. This resulted in a communiqué highlighting areas for action. To assist in achieving the desired outcomes, New Zealand offered to help the TEC (Tuvalu Energy Corporation) to provide higher quality electricity services at the lowest costs to consumers. The work was administered by the Ministry of Economic Development and was funded through the New Zealand Government Agencies Fund.

The first phase of the project was completed in late 2008 and included:

- 1. a review of distribution losses, both technical and non-technical
- 2. identification of opportunities for system design and operational performance improvements
- 3. a review and identification of demand-side management and renewable energy opportunities.

The second phase implemented the recommendations from phase 1. Phase 2 included:

- 1. training the TEC staff in the distribution system and in asset management
- 2. developing methods for the TEC to evaluate solar photovoltaic options
- 3. feasibility studies on the use of copra oil and wind for electricity generation
- 4. identification of opportunities for greater energy efficiency, and the setting up of a programme for improvement together with policy options for government
 - 5. recommendations for improved corporate management.

Indicate factors that led to project's success

The training/capacity building component means that the TEC can improve its service itself and be less dependent on external consultants. As well as identifying key renewable energy options for Tuvalu, the project developed methods through which the TEC could evaluate renewable energy options itself.

By considering the overall design of the electricity system, and making recommendations on corporate management, the project may also help to ensure the continued economic viability of Tuvalu's electricity company.

Technology transferred

The project recommended a number of ways that Tuvalu can reduce its reliance on diesel generation through a greater use of wind, copra oil, biogas and energy-efficiency technologies.

Impact on greenhouse gas emissions/sinks

Depending on the outcome of the project, a greater use of renewable energy and energy-efficiency measures will reduce Tuvalu's use of diesel for electricity generation and reduce greenhouse gas emissions.