

# Concept Note

Business Skills Training on Income Opportunities from Increased Electricity Supply at Vava'u Outer Islands.

27 – 28 January 2025

## Background

### Tonga Energy Sector

The Tonga Energy Road Map Plus (TERMPLUS) extends Tonga's original Tonga Energy to further advance the country's sustainable energy goals. It includes several specific targets that align well with Tonga's updated Nationally Determined Contributions (NDCs) and overall climate resilience strategy, including "Renewable Energy Share: achieving a higher percentage of renewable energy in the national electricity grid by 70% in 2030."

Through this target, the Tonga Renewable Energy Projects (TREP), which is co-financed by the Green Climate Fund (GCF), the Asian Development Bank, and the Government of Australia, is amongst the key projects that are currently implemented in Tonga in pursuit of the adopted national target. One of the key components of the project was to electrify 4 outer islands (Hunga, 'Otea, Falevai, Ofu) in Vava'u with a solar mini-grid system where these island residents can access an AC power supply. Residents on the outer islands of Vava'u rely on Solar Home Systems (SHS) for DC power, primarily used for basic lighting and charging mobile phones or portable radios. These systems are managed by the Vava'u Outer Islands Solar Electrification Societies (VOISES). However, DC power is limited in capacity and restricts the range of applications available to residents.

The TREP project aims to upgrade these four outer islands in Vava'u from solar home systems to mini-grid systems, which are expected to be commissioned in the second quarter of 2025. Once operational, these mini-grid systems will provide 24/7 electricity access, replacing the current SHS systems, which only supply power for limited hours each day.

With this change, training the communities of these four islands in business skills is necessary. As the electricity supply increases, the opportunity for income generation will increase. There is therefore a need to expose the communities to the available business opportunities, equip them with the technical and business skills to realize these opportunities and to sustainably manage a micro business based on the improved and more reliable electricity supply.

### Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE) - TREP Partnerships

The Nuku'alofa-based PCREEE is co-hosted by the Pacific Community (SPC) and the Government of Tonga and is a young and new contributor to the National Energy Target (TERM and now TERM Plus) and has continuously supported the Tonga Department of Energy with its effort on energy transition.

The PCREEE Business Plan 2020-2030 calls on the PCREEE to provide support to improve the policy and regulatory frameworks and business enabling environment for rural electrification at both the regional and national levels.

Since the establishment of the PCREEE in Nuku'alofa, the center has supported the Government of

Tonga through its Tonga Renewable Energy Project with delivering of business skills and productive use of energy training at Ha'apai outer islands (Kotu & 'O'ua) in February 2024 through a collaboration with the Infratec NZ. Link for the training materials is [here](#).

## Request for Support: PCREEE – CBS Power Solution Joint Event

The Ministry of MEIDECC engaged CBS Power Solution (Fiji) to carry out design, construction and commissioning of complete minigrids power systems in the outer islands of Vava'u, Tonga. Each system shall comprise of a village level solar photovoltaic array, battery energy storage system (BESS) and a distribution system with customer connections for four sites; Falevai, Hunga, Ofu and 'Otea Island. The construction works are currently underway and anticipated to be completed during the 1<sup>st</sup> or 2<sup>nd</sup> quarter of 2025.

On June 2024, CBS Power Solution reached out and requested PCREEE to conduct business skills training with these 4 local communities.

The information in Table 1 below indicates existing business skills in the 4 outer islands. Therefore, the training required in technical and business skills on income opportunities should focus on the following:

- **Training Objective:**

*To enhance the technical and business skills of the communities so as to generate micro income-generating business activities based on the improved electricity supply.*

- **Required Income Generation Topics:**

- Agricultural Production: Activities such as drying food, processing and preserving food, and raising livestock and poultry – *misini keli ma'ala fakamaka, misini tuki kava*
- Dairy Products: Preparing and marketing dairy products – *ngaahi kai & inu*
- Handicrafts: Creating handicrafts, *misini fakapa tutu, haka lou'akau, lalanga, etc*
- Shopkeeping: Activities related to running a shop – *fakatau mai koloa pe toutai 'o toe fktau atu*
- Other skills – kosi/ ngaahi 'ulu, charge maka uku moe mobile phone, fakalele DJ pe hire me'angaue ki he ngaahi Katoanga, fo totongi

- **Required Business Skills Topics:**

- What is capital – *pa'anga kamata ki he me'angaue, etc*
- What is operational costs – *pa'anga ngaue faka'aho*
- Keeping a record of your capital / keeping a record of your everyday transactions
- Filling in a receipt book – recording the income and expenses
- How to do a budget for the business?
- Doing a monthly progress report of the business
- Many more to be covered but above are some basics to start with.

- **Training Evaluation**

- *A pre- and post-training evaluation is required.*

- **Training Participants**

*50% of women participate in the Training for each island.*

## Objectives

- To build on the business skills and capacity of the island residents to engage in income-generating activity from increased electricity supply.
- Promote the adoption of Energy Efficiency measures and the productive use/utilization of energy
- Raising awareness of possible small-scale business opportunities and available subsidies to assist the establishment of sustainable energy businesses.

## Training program strategy and contents

### Timeframe:

- Saturday 25 January 2025: Depart Nuku'alofa to Vava'u
- Monday 27 January 2025: Hunga & 'Otea
- Tuesday 28 January 2025: Falevai & Ofu – most likely the Falevai training will be held in Neiafu as majority of the Falevai residents are staying there.
- Wednesday 29 January: Depart Vava'u to Nuku'alofa

\*\*Duration of training: maximum of 1 - 2 hour(s) per island

\*\*training agenda for the training is contained in Annex 1.

**Women, girls and people with special needs are much encouraged to participate in these training awareness programs and will be mentioned in the invitation letter.**

A perception assessment has been conducted to determine the required business skills regarding income opportunities to train the communities of the four outer islands of Vava'u. The following table 1 shows the findings.

**Table 1:** Baseline information of the 4 outer islands

Name of Island	Total Pop		No. of Female Headed Household	No. of Disable	No. of Businesses	Primary Source of Income	Existing Business Skills	Electrical Appliances	Main Livelihood
	Female	Male							
Ofu	61	72	6	8	3	Women's weaving Fisheries Agriculture Tourism	Fishing Tourism activities	Washing machine Refrigerator Generator Iron Fan	Fishing Farming Weaving
Otea	116	100	10	3	2	Women's weaving Fisheries Agriculture	Fishing Cooking to sell in Neiafu Handicraft Carving Tourism activities	Washing machine Refrigerator Generator Iron Fan Sewing Machine TV Radio	Fishing Farming Weaving
Falevai	100	130	14	3	1	Women's weaving Fisheries	Fishing Cooking to sell in Neiafu	Washing machine TV Radio	Fishing Farming Weaving

						Agriculture	Handicraft Carving Tourism activities		
Hunga	82	88	39	4	3	Women's weaving Fisheries Agriculture	Fishing Cooking to sell in Neiafu Handicraft Carving Tourism activities	Washing machine Refrigerator Generator Iron Fan Sewing Machine TV Radio	Fishing Farming Weaving

## Output & Deliverables /Reporting

A training summary report is required to be submitted after 3 days of the training. The report will include but not be limited to the following:

[Name of Training]

[Date and Venue of Training]

### **1. Introduction**

Briefly describe the purpose of the training, who is the target audience and who is the training facilitator.

Outline the topic covered in the training.

How was the training delivered? i.e. PowerPoint presentation, practical, etc.

Number of participants in the training. % of females and % of males who attended the training.

### **2. Training Evaluation**

Briefly describe how the training was evaluated.

### **3. List of Participants**

Attach the Participation signed sheet here.

### **4. Photos from the Training Sessions**

## Budget and Cost

To successfully deliver this training, the PCREEE and CBS Power Solution will co-finance the proposed activities, as outlined below:

### **CBS will fund:**

- the travel expenses of one PCREEE staff including return airfares and per diems (SPC per diem rates for Vava'u).
- arrange and pay directly for the boat as well as the refreshment for the training at each island.

### **PCREEE will fund:**

- travel expenses of one PCREEE staff including return airfares and per diems (SPC per diem rates for Vava'u)

## Annex 1 – Training Tentative Agenda

Agenda items (proposed high-level topics)	Facilitator /presenter
Brief overview of the training, its objectives and what will be covered. 5 mins	PCREEE (Sosefo)
Tonga Renewable Energy Project – background & progress to date. 5 mins	CBS
Introduce PCREEE and its roles and share experiences with their support provided to Pacific Islands Countries including Tonga, in terms of: <ul style="list-style-type: none"> <li>• Sustainable Energy Business Start-up includes sustainable Energy qualifications in Tonga</li> <li>• Sustainable E-mobility – EVs etc</li> <li>• Mini grids</li> <li>• Energy Efficiency Investment</li> </ul> 5 mins Presentation on Business Skills and Productive Use of Energy <ul style="list-style-type: none"> <li>• Identifying income opportunities – refrigeration for fisheries, tailoring, restaurants /cafes, handicraft etc.</li> <li>• Basic Financial Management – budgeting for startup /capital costs and operating expenses, understanding revenue, profit and cash flow.</li> <li>• Electricity costs and savings – how to read monthly bill and to understand electricity usage, rates and bills.</li> <li>• Strategies to minimize operational costs with energy efficiency – elaborate on Minimum Energy Performance Standards and Labelling.</li> </ul> 20 mins	PCREEE (intern)  PCREEE (Sosefo)
Questions and Answers Session 20	Facilitated by PCREEE (Sosefo)
<b>Wrap Up and Close</b> 5 mins	Facilitated by PCREEE (Sosefo)
** Refreshments will be provided at each island.	