

Training Report

“Business Skills Training on Income Opportunities from Increased Electricity Supply at Ha’apai Outer Islands.”

Ha’apai, Tonga | 10 – 11 February 2025



Group photo after training at Mo’unga’one [photo taken on Mon 10th Feb 2025]

1. Introduction

The Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE), in close collaboration with Infratec Ltd, conducted a two-days training on business skills and productive use of energy in Ha'apai outer islands namely Mo'unga'one and Tungua on February 10- 11, 2025. The training aimed to equip participants with essential business skills and financial management to leverage income opportunities arising from the transition to AC power through mini-grid systems, as well as basic electrical safety and energy efficiency measures.

The training agenda is contained in **Annex 1**.

2. Training Objectives

The objectives of the training were:

- To enhance participants' understanding of basic financial management principles.
- To provide insights into business opportunities enabled by the shift from solar home systems to AC mini-grid power supply.
- To encourage sustainable and productive use of electricity for economic activities.
- To promote awareness of basic electrical safety and energy efficiency measures.

3. Training Methodology and Participants

The training was successfully conducted at Mo'unga'one on Monday 10th February, followed by Tungua on Tuesday 11th February 2025.

The training was delivered through a power-point presentation (in Tongan translation) and a question-and-answer session was allocated after each segment to address concerns from the participants. However, the English version of the power point is also available for reporting purposes etc.

Resource people

The following were the training co-facilitators, each covering specific topics during the training:

Ms. Annie Malolo (an intern) from the PCREEE

- Introduce PCREEE and its roles and to share experiences with their support provided to Pacific Island Countries (PICs).

Mr. Sosefo Tofu from PCREEE

- Presentation on Business Skills and Productive Use of Energy
- Provided an overview of key components of the installed mini-grid system on each island.
- Provided some tips on energy efficiency as well as key electrical safety precautions.

Over 30 participants benefitted from this training and participant list for each island can be accessed through [here](#) or contained in **Annex 2**.

During the training at:

- Mo'unga'one:** 16 people signed the training registration. Out of 16, 9 or 57% were male and 7 or 23% were female.
*** The training facilitators acknowledged the participation of a 78-year-old mother who managed to come in a wheelchair.*

- ii. **Tungua:** 21 people signed the training registration. Out of 21, 11 or 52% were male and 48% or 10 were female.

4. Summary of sessions

As outlined in the program agenda, the topics covered in the training across the two islands were broadly similar. The following is a summary of each session. To ensure the content was accessible and aligned with the level of understanding of the island residents, the training facilitators delivered their presentation in a bilingual manner i.e. both English and Tongan.

This section will summarize all the topics/agendas that have been presented to participants during the training.

All presentation slides can be accessed [here](#).

Session 1: PCREEE Overview and Support for Renewable Energy and Business Development

Facilitator: Ms. Annie Malolo (an intern) – PCREEE

Ms Malolo began the presentation by providing an outline of the topics that have covered during the training. The topics that have been covered are categorized into three:

1. *PCREEE's background – roles and experiences*

- She provided an overview of the organization's background and its roles. PCREEE was formally established in April 2017 to promote and support private sector investment in Renewable Energy (RE) and Energy Efficiency (EE) in the Pacific region.
- Key areas of support to PIC include:
 - ✓ Capacity Buildings Program
 - ✓ Energy Policy Development – (incl. guidelines /standards)
 - ✓ Energy Forum, Awareness
 - ✓ Funding subsidy [incentives]
 - ✓ Development/review of Concept Note and Project Proposal.
- She has introduced the 4 program areas within the PCREEE Business Plan 2020-2030 Strategic Program, examples of supporting initiatives for PICTs were highlighted under each area.

a. *Program 1: RE & EE Business Start-up and Entrepreneurship Support*

- Supported the development of Sustainable Energy Certificate o In Tonga, NSCE Level 1 & 2 successfully started on the 12 September 2022 with 20 students (71% female, 29% male) registered under Level 1 and 30 students for Level 2 (21% female, 79% male).
- Certificate Level 3 has successfully registered in Tonga 2023 while development of Certificate 4 is underway.
- Introduced a subsidy scheme to increase RE&EE business opportunities – e.g. Vanuatu and Solomon Islands
- Promoted RE Business Start-ups and Entrepreneurship in the Rural Areas of Vanuatu.
- Provided internship opportunities for tertiary students to gain practical experience.

b. Program 2: RE & EE for Sustainable Mobility

- Supported the development of Regional E-mobility Policy – started rolling out in 2021.
- Supported the demonstration of EV technologies and business services.
- Supported the development of EV standards and guidelines.
- Hosted both regional and national workshops on E-mobility.

c. Program 3: RE Mini Grids

- Supported with capacity programs and training on mini -grids maintenance and operation such as the mini-grids training that delivered in Ha'apai outer island in early 2024.
- Supported the development of standards and guidelines for Mini grids.
- Conducted Feasibility Study and promoted national mini - grid awareness, information and promotion campaign.

d. Program 4: Energy Efficiency Investment.

- Supported the Pacific Island Countries with operationalizing the Energy Efficiency Legislations – such as the Minimum Energy Performance Standards and Labelling regulation.
- Supported the national energy events – forums/awareness etc.

Facilitator: Mr. Sosefo Tofu– PCREEE

2. Basic Business Skills and Financial Management.

- He began the presentation with providing a baseline information on the existing businesses that are currently operating at the outer islands such as Fisheries and agricultural products as well as handicrafts.
- Some of the potential income opportunities upon accessing 240 AC power supply were shared:
 - a. Barber shop
 - b. Retail shop
 - c. Hired-DJ
 - d. Restaurant and resort
 - e. Tailoring
 - f. Laundry
 - g. Etc.
- Before starting a business, you might need to consider thinking about these key steps:
 - a. Develop a business idea
 - b. Create a simple business plan
 - c. Register your business
 - d. Open your bank account.
- Various ways of accessing start-up funds to establish businesses. Could be from:
 - a. your personal saving
 - b. Bank loan
 - c. Microfinance loan – SPPD etc.
 - d. Government grants/subsidy program.

- Some of the basics financial management were provided to participants/ residents as below:
 - a. Cash flow – it refers to the movement of money in and out of a business. It is essential to understand how the business earns revenue and how that money is allocated to cover expenses on time, prevent cash shortages, and set aside savings for emergencies and future growth
 - b. Budgeting – **planning** of how much \$\$ you expect to earn (income) and how much to spend (expenses).
An example was provided to participants of how to do a simple budget for running/operating a barber shop.
 - c. Record keeping – involved collecting, organizing, storing and maintaining information related to a business’s financial and operational activities.

3. Electricity Cost and energy efficiency initiatives.

- This session introduced participants to:
 - a. Understanding electricity costs and billing.
 - A copy of the monthly electricity bill from Tongatapu and Neiafu was shared, highlighting the importance of tracking power usage on a daily or weekly basis.
 - b. Energy efficiency measures to reduce electricity consumption
 - The Minimum Energy Performance Standards and Labelling (MEPSL) program was introduced as one of the key initiatives to promote the use of energy-efficient appliances across Tonga. As part of the MEPSL program, the energy star labels currently used in New Zealand and Australia were highlighted

Session 2: Electrical Safety tips

Facilitator: Mr. Sosefo Tofu from the PCREEE

Mr. Sosefo Tofu once again delivered a session on “Electrical Safety Training, focusing on key aspects of mini-grid systems and household electrical safety. The presentation covered the following topics:

1. Overview of Mini-Grid system components.
 - Explanation of the main components of a mini-grid system, including generation sources (solar panels, batteries, and controllers and inverters).
 - Distribution network structure and how electricity is delivered to households.
 - The role of inverters and charge controllers in regulating electricity supply.
2. Key Electrical Components in a Household
 - Main Switch: Turns off power to your home in emergencies.
 - RCBOs (Residual Current Breaker with Overload): Protects against electric shocks and overload.
 - SPDs (Surge Protection Devices): Protects against power surges.
 - MCBs (Miniature Circuit Breakers): Protects individual circuits.
 - Lights and power points.
3. Electrical Safety Tips
 - Don’t:
 - Wet Hands: Never touch outlets or switches with wet hands.

- Overload: Don't plug too many devices into one outlet.
- Damaged Equipment: Don't use broken cords, plugs, or appliances.
- Children: Keep them away from outlets and electrical devices.
- Water: Don't use water to put away electrical sparks or fire.
- Electrical Fault: Don't attempt to repair or fix any issue in the sub-board, switches and outlets. Report the issue to the technician
- Emergency response:
 - Electrocution: Turn off the main switch immediately. Do not touch the person directly.
 - Call for Help: Contact the technician or local emergency services

5. Training Evaluation

To assess the effectiveness of the training, evaluation was conducted using qualitative approaches. The evaluation aimed to gather insights into the training content, delivery, and overall impact on participants.

1. Evaluation Methods

The following approaches were used to evaluate the training:

- Interactive discussions & Q&A sessions: after each session, participants engaged in discussions and asked questions to clarify concepts, express concerns and share their perspectives on the topics presented.
- Observations by facilitators: the facilitators assessed participants' engagement, attentiveness, and level of understanding throughout the sessions, noting areas where additional explanations were required.

2. Key Evaluation Criteria.

- Participants' responses were assessed based on the following criteria:
 - i. Relevance of the topics: usefulness of the training content in relation to business opportunities and basic financial management.
 - ii. Presentation quality – clarity and effectiveness of the facilitators in delivering the sessions.
 - iii. Practical Application – participants' confidence in applying the knowledge gained to improve their business activities (if already existed).
 - iv. Overall Satisfaction – General feedback on the training experience and recommendations for further training sessions.

3. Summary of Evaluation Findings.

Participants expressed appreciation for the training, particularly on the key roles of the PCREEE and support provided to PICs, understanding basics financial management, identifying new business opportunities, and learning about electrical safety measures. The interactive discussions were well received, and most participants highlighted the importance of ongoing support and follow-up training sessions.

The feedback gathered from this evaluation will help improve future training programs, ensuring they continue to address the needs of outer island communities effectively.

6. Conclusion

The Business Skills and Productive Use of Energy Training in Ha'apai Outer Islands, conducted from Monday 10th to Tuesday 11th February, 2025, was an essential initiative aimed at equipping communities with foundational business knowledge and practical financial management skills. Participants gained insights into income-generating opportunities enabled by the transition from solar home systems to AC power through mini-grid systems. Additionally, the training promoted energy efficiency, electrical safety, and sustainable electricity use to support economic growth in rural communities.

The training, attended by over 30 participants, was well-received, with high engagement across the two islands. The interactive sessions facilitated practical discussions on financial planning, record-keeping, and small business development, while hands-on demonstrations reinforced key safety and efficiency measures.

While the training successfully met its objectives, follow-up support will be essential to ensure long-term impact. Future initiatives could focus on access to financing for start-ups, advanced business planning, and ongoing technical support for productive energy use and/or energy efficiency initiatives.

The collaboration between PCREEE, Infratec Ltd and the Ministry of MEIDECC has set a strong foundation for empowering communities at the outer islands in Ha'apai to maximize the benefits of sustainable electrification. Continued efforts in capacity-building and stakeholder engagement will further enhance economic resilience and energy sustainability in Tonga's outer islands.

Annex 2 – Participant List

1. Mo'unga'one

Participant's list
Business Skills Training on Income Opportunities from Increased Electricity Supply at Ha'apai
Outer Islands, 10 – 11 February 2025

Date: 10/02/2025
Time: 10am
Place: Mo'unga'one

	Name	Gender (Male/Female)	Contact Number	Signature
1	Ananaki Pomana	Male	843 1617	Ananaki
2	Sefo Toka	M	7315702	Sefo
3	Folan. Vaianounga	M	7724128	Folan
4	Ilaisaane. Iloa	F	7318065	Iloa
5	Akanesi Kouesi	F	7315707	Kouesi
6	Akanesi Pakeila	F	8442129	Pakeila
7	Ane Kataoa	F	73-14848	Akataoa
8	Sione Seofi	M	8779733	Seofi
9	Kapiatu Vaimounga	F	7320044	Kapiatu Vaimounga
10	Sione Lafou	M	706779	Sione
11	Sokokoua Nuli	F	7221239	Nuli
12	Lutakheone Sili	M	7733637	Sili
13	Apoa Funaki	M	7313547	Funaki
14	Dione Latis	M	7714079	Latis
15	Annie Nonie Makilo	F	7205492	Makilo
16	Sesepi Tofi	M	7747446	Tofi
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2. Tungua

Participant's list
Business Skills Training on Income Opportunities from Increased Electricity Supply at Ha'apai
Outer Islands, 10 – 11 February 2025

Date: 11/02/2025
 Time: 1pm
 Place: Tungua

	Name	Gender (Male/Female)	Contact Number	Signature
1	Tolani Tonga	Female	7209645	T. Tonga
2	Lotima Tuhi'itau	M	7727370	L. Tuhi'itau
3	Ana Haunga	F	1319534	A. Haunga
4	Apivasi Vaikimunga	Female	7213-016	Vaikimunga
5	Eseta Lositani	Female	7761314	E. Lositani
6	Saki Tau	FEMALE	7748601	S. T. T.
7	Katalina Tonga	FEMALE	77-86711	K. Tonga
8	Tomas Tafatou	M	77-28811	T. Tafatou
9	Stone Va'ara Pule	M	7700252	S.V.P.
10	Saanaa Fuaa	-M	7739937	S. Fuaa
11	Laukau Vaikimunga	M	7211778	L. Vaikimunga
12	Tungua Tuai	Male	7512037	T. Tuai
13	Nunuma Piniua	M		N. Piniua
14	Malaki Muihamaa	F	77-34628	M. Muihamaa
15	Luse Tuameiuta	F	75-12037	L. Tuameiuta
16	Mo'hi	F	7736854	M. Mo'hi
17	Tokelan Foukimoana	M	7771082	T. Foukimoana
18	Simate Tafatou	M	7240024	S. Tafatou
19	Sione Paea	M	7712545	S. Paea
20	SUA TA'FA	M		S. Ta'fa
21	Annie Nave Maloto	F	7205492	A. Maloto
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Annex 3 – Training photos

You can access photos during the training through [here](#).