

## WORKSHOP ANNOUNCEMENT

**TO:** Representatives of Governments and Administrations of Cook Is, Fiji, FSM, RMI, Kiribati, Palau, PNG, Solomon Islands, Tonga, Tuvalu and Vanuatu **No:** 23/36

**COPY:** SPC Energy contacts  
Energy Regulators  
Power Utilities

**FILE:** PRO 143/3/2 **DATE:** 27<sup>th</sup> April 2023

**SUBJECT: UNLOCKING MINI-GRIDS FOR SUSTAINABLE DEVELOPMENT: A REGIONAL HANDS-ON TRAINING FOR THE PACIFIC ISLANDS Suva, Fiji: 26 – 30 June 2023**

### BACKGROUND

1. During the last decade, there has been a notable increase in the installed capacity of renewable energy powered mini-grid systems in rural and remote areas of Pacific Islands and internationally. Some of these systems consist of solar panels and batteries, besides the back-up diesel generators. In others, only standalone solar PV systems are coupled with diesel generators or other renewable technologies. It has been 3-4 years since the commissioning of a few of these mini-grids systems in the Pacific, while others are underway (i.e., Kiribati's STREP and Tonga's TREP).
2. However, it is obvious that the market-uptake of such mini-grids is facing manifold barriers, which are worthwhile to be addressed through a regional approach. There is a need for dedicated legislation and incentives aimed at building confidence among operators, suppliers and consumers. These policy interventions should be based on sustainable tariff, operation and business models. Experience in the Pacific has shown that spare parts left behind by the original funded projects are currently running low and maintenance costs are slowly increasing. Furthermore, while existing legislation for regulators covers the inspection of electrical house wirings, there is a need for the energy regulators to be involved, not only in the final inspection and commissioning of the installed mini-grid systems but also throughout the planning phase. Therefore, there is a compelling demand for a regional training to learn from the best international practices and the latest experiences in the field.
3. PCREEE has defined renewable energy mini-grids for productive uses as a priority program in its Business Plan. Therefore, as a follow-up to the 4<sup>th</sup> International Conference on Solar Technologies & Hybrid Mini Grids, PCREEE and UNIDO are organizing a training on renewable hybrid mini-grids in the Pacific, which will be provided by experienced experts from Trama TecnoAmbiental. The training will include knowledge transfer from other regional and centers of the Global Network of Regional Sustainable Energy Centres (GN-SEC), which have extensively worked on mini-grid issues.

## OBJECTIVES

### 4. The training is aimed:

- i) To support the capacity of government officials and the private sector in the design, installation, and maintenance of solar mini-grids systems.
- ii) To support the capacity of government officials to develop effective policies, legislation, business, and operational models, as well as incentives for sustainable mini-grid market uptake.
- iii) To strengthen the capacity of the Energy Regulators to effectively inspect and participate in the commissioning of mini-grid systems and their subsequent monitoring of their performance.
- iv) To assist PICs in dealing effectively with the common technical challenges relating to the reliability, safety, and resilience of electricity services from RE mini-grids systems.
- v) To strengthen the capacity of government officials in the initial stages of project development (planning) to design interventions that maximize their positive impact and ensure their sustainability.
- vi) To present and discuss delivery models and different strategies for private sector involvement through Public-Private Partnerships.
- vii) To provide inputs for the final design of the PCREEE Mini-grid Program and tap into best practices from other GN-SEC regions.

## EXPECTED OUTCOMES

### 5. The expected outcomes of the workshop are:

- i) Strengthened capacities of participants on practical mini-grid issues
- ii) An updated stocktake of progress with mini-grids in the region.
- iii) Collected inputs for the PCREEE Mini-grid Program.
- iv) Strengthened partnerships and coordination of mini-grid effort in the PICTs

### 6. A draft of the training overview programme is attached as **Annex 2**.

## PARTICIPANTS

- 7. The workshop will benefit managers and technical staff of energy offices, energy regulators and power utilities who are working on mini-grids and rural electrification programmes.
- 8. The PCREEE will fund the participation of only participant per country. Self-funded participants are most welcome to participate on their own costs.

9. Women and girls are strongly encouraged to participate.
10. All nominations for the SPC-sponsored participants as well as the self and other sponsored participants should be received by the Secretariat by 20th May 2023.

#### **TRAVEL AND DSA**

11. An economy class return ticket by the most economical route will be provided to participants sponsored by the SPC.
12. Travel orders cannot be issued until the official nominations have been received.
13. A per-diem will be provided to participants funded by the SPC to cover hotel accommodation, meals, and incidentals. If an overnight transit is necessary, full per diem will be paid, however, participants will be responsible for these hotel arrangements. Hotel receipts will be required as proof of accommodation being used.

#### **WORKSHOP MODALITY**

14. The workshop will be convened in a hybrid format of online and in-person attendance. The workshop link will be provided closer to the workshop date.

#### **FIJI TRAVEL ENTRY**

15. SPC is pleased to advise that visas are no longer required for entry into / transit through Fiji for stays of up to three months for nationals of all SPC member countries.
16. All other countries, please seek assistance from your nearest Consulate to have your visa prior to your arrival and to comply with any health requirements.
17. Transit visas are the responsibility of participants, however, SPC may be able to assist through a letter of introduction, if required.

#### **INSURANCE**

18. The Pacific Community and the workshop partners do not insure participants while attending workshops and meetings or during travel to and from Tonga and will not be responsible for any expenses arising out of loss, sickness, injury, other disability or loss of life. It is participants' own responsibility to ensure that their travel is covered by insurance.

For further information about the workshop, please contact Sinalauli'i Fifita on details below:

Mrs.Sinalaulii Fifita  
Programme Assistant - PCREEE  
Georesources and Energy Programme, Geoscience  
Energy and Maritime Division  
Ph: (+676) 25209 Mob: (+676) 7231778  
Email: [sinalauliif@spc.int](mailto:sinalauliif@spc.int)



**Dr Paula Vivili**  
Deputy Director-General, Science and Capability

**Attachments:**

1. Annex 1 – Nomination form for funded participants
2. Annex 2 – Draft Agenda
3. Annex 3 – PCREEE Mini-grid study on the Pacific

## Annex 1

### **NOMINATION FORM FOR FUNDED PARTICIPANTS**

**UNLOCKING MINI-GRIDS FOR SUSTAINABLE DEVELOPMENT:  
A REGIONAL HANDS-ON TRAINING FOR THE PACIFIC ISLANDS  
Suva, Fiji: 26 – 30 June 2023**

Please submit the completed form to [sinalauliif@spc.int](mailto:sinalauliif@spc.int) by May 20<sup>th</sup>, 2023.

**1. Name of participant attending in person:** \_\_\_\_\_

Designation: \_\_\_\_\_

Organisation: \_\_\_\_\_

Email Address: \_\_\_\_\_

Contact number: \_\_\_\_\_ (Work) \_\_\_\_\_ (Home)

Dietary Restrictions: \_\_\_\_\_

*(Please send a copy of the biodata page of your current passport with this form)*

#### **Any other special request**

Yes / No      \*If the response is "Yes", please specify below.

---

---

## Annex 2

### Training Agenda Overview: Hybrid Renewable Energy Mini-Grids

#### DAY 1: How to establish an enabling framework for the promotion of mini-grids

- **Electrification planning.** Description of the process and state of the art geospatial tools.
- **Regulation of mini grids.** Presentation of different approaches, elements to be covered, and key references.
- **Business models.** Discussion on the role of the public and the private sectors, and potential Public-Private Partnerships (PPP).
- **Tariff definition.** Tariff definition, types of tariffs, tariff structures, ability to pay and willingness to pay analysis.
- **Subsidies.** Introduction of the different types of subsidies typically used in mini-grid projects.
- **Case studies.** Presentation of real project examples to be used as basis for discussion.

#### DAY 2: Key technical aspects for mini-grid design

- **Demand assessment.** How to characterize the demand in unelectrified communities.
- **Resource assessment.** Presentation of tools and resources to characterize the energy resource.
- **Feasibility analysis.** Key aspects for the preparation of technical and financial feasibility assessments for mini-grids.
- **HOMER.** Basics on the use of HOMER Pro for the system sizing.
- **Engineering design.** Recommendations for the design of mini-grids.
- **Case studies.** Presentation of real project examples to be used as basis for discussion.

#### DAY 3: Mini-grid project implementation and operation

- **Procurement.** Basics on procurement policies, templates, and procedures.
- **Installation.** Best practices and field recommendations for the installation of mini-grids.
- **Operation & Maintenance.** Metering, control, maintenance routines.
- **Case studies.** Presentation of real project examples to be used as basis for discussion.

#### DAY 4: Site visit.

- The exact location, TBD.

#### DAY 5: Briefings

- Clean Energy Access for Remote Pacific Island Countries – CLEARPICs
- The SPC Flagship Integrated Programme on Climate Change
- PACWES

### **Annex 3**

PCREEE Mini Grid Study on the Pacific – Please refer link - [PCREEE Renewable Energy Mini-grid Programme for the PICTs \(REMPP\) | PCREEE](#)