

Sustainable Energy Industry Development Project (SEIDP)

PROJECT PROGRESS – PPA ANNUAL CONFERENCE 2018, KOROR,
PALAU

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PROJECT INFORMATION

Sustainable Energy Industry Development Project

Approval Date	29 September 2015
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Effectiveness Date	23 March 2016
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Closing Date	31 August 2020
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Total Grant	USD 5.66million
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Total Disbursed to date (Total expended plus committed)	USD 1.7million
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Total contracts to be awarded by the end of 2018	~USD 2.2million
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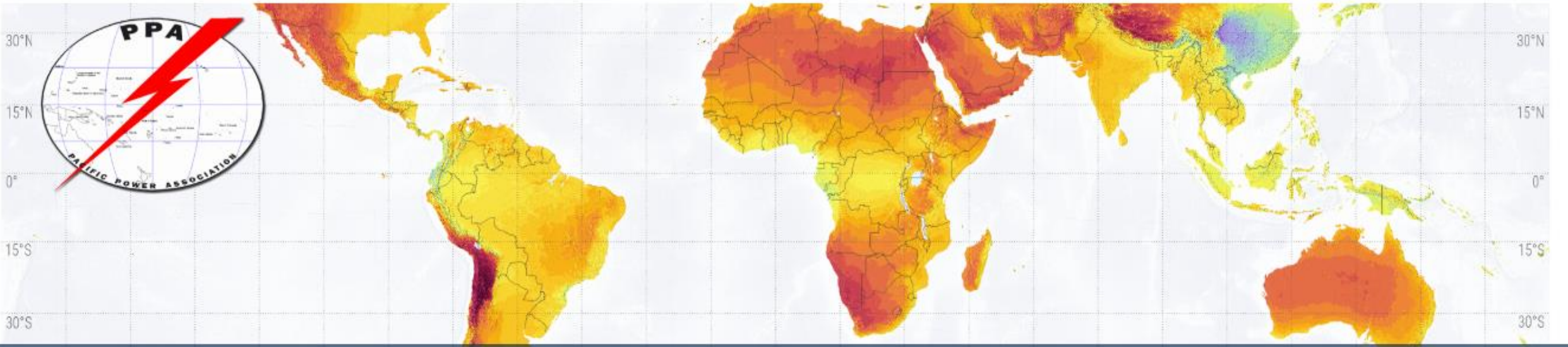
Mid Term Review	May 2018
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Project Objectives



Component 1: Solar and Wind Resource Assessment

- Phase 1: Desk based resource maps
 - Solar resource maps distributed at PPA conference in Samoa
 - Wind resource maps available online
 - Can be accessed from PPA Website
- Phase 2: Ground-based data collection
 - High resolution data from 11 solar stations & 4 wind stations
 - Bid is out now – closes in August
 - At least two years on ground measurements
- Phase 3: Validated resource maps based on data from Phase 2



Solar & Wind Resource Maps

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Long-term average of daily/yearly sum

Solar & Wind Resource Maps

This component of the project will carry out a resource-mapping assessment of solar and wind capacity across 10 PPA member countries. The objective of this component is to enhance the awareness and knowledge of governments, utilities and the private sector about the resource potential for renewable technologies (solar and wind), and to provide governments with a spatial planning framework to guide investment in the RE sector. These resource maps will: (a) provide a detailed assessment for solar and wind and potentially other renewable energy resources in the islands; (b) increase the awareness and knowledge of governments and other energy sector players about renewable energy potential; (c) provide baseline information for potential new public and private sector investment projects; and (d) serve as an input for grid integration studies.

Component 2 : Technical Assistance

- Power system Modelling software PowerFactory acquired by PPA is now available online for utilities to use;
- Online power benchmarking platform – evaluation of bids underway;
- Renewable Energy & Energy Efficiency guidelines, competency standards and workshops – contract awarded to GSES;
- Trainings & Workshops;
- Training Needs Analysis & Career Development Initiatives;
- Disaster Recovery and Disaster Risk Management Plans;

Component 2 : Technical Assistance

- Training workshops carried out under the project so far include –
 - Training on the use of PowerFactory software and introduction to power system modelling;
 - Benchmarking;
 - Solar PV O & M, Energy Storage Systems & SCADA;
 - VRE & Grid Integration;



Component 3 : Implementation Support

- Project Implementation
 - Project Coordinator – Executive Director of PPA;
 - Contracted Staff - Project Implementation Officer, Procurement Advisor & Electrical Engineer;
 - PPA support staff;
 - Technical Advisory Group – provides advice & guidance to project team. Currently consists of CEO EPC (Samoa), CEO TEC (Tuvalu) & AGM YSPSC (Yap)

VRE Grid Integration, SCADA & EMS

- Additional Financing/Bank executed activity with support from SEIDP/PPA
 - (i) Development of VRE grid code recommendations and standards;
 - (ii) Analysis of VRE system impacts through VRE grid integration studies and
 - (iii) Evaluation and specification of SCADA and Energy Management System (EMS)
- Draft reports to be discussed with target utilities & training on working with power system models – September 2018.

Value of Lost Load (VoLL) study

- Bank executed activity with support from SEIDP/PPA
- Objective is to estimate the Value of Lost Load (VoLL), and the linkage of energy efficiency and VoLL in selected utilities;
- Consultants have been recruited and have started the initial phase of the study.

Renewable Energy & Energy Efficiency Guidelines, competency standards & in country workshops

- Update 4 existing technical guidelines developed by PPA/SEIAPI in 2014 – completed.
- Develop 13 new technical guidelines – 1 completed on Energy Storage systems.
- Conduct workshops in 11 Pacific countries and territories – starting week of Aug. 5th 2018 in Palau.
- Update the 5 existing training units of Competency developed to support the PPA/SEIAPI technician certification and company accreditation program.
- Develop 8 new training Units of Competency.

In-country workshops on the Guidelines

<u>Location</u>	<u>Week Starting</u>		
➤ Palau	6th August	➤ Tuvalu	10th September
➤ Yap	13th August	➤ Kiribati	17th September
➤ Chuuk	20th August	➤ Vanuatu	8th October
➤ Pohnpei	27th August	➤ PNG (Port M)	29th October
➤ Kosrae	3rd September	➤ PNG (Lae)	5th November
➤ Fiji	3rd September	➤ Samoa	12th November
➤ RMI	10th September	➤ Solomon Is	19th November
		➤ Tonga	3rd December

Disaster recovery and disaster risk management

- Jointly executed with the support from the World Bank DRM team;
- Questionnaires have been circulated to utilities to feed into the development of TORs;
- Utilities selected based on expressions of interest received by project team;
- Specific tasks under this activity include:
 - Developing a framework for post disaster response initiative for PPA utilities;
 - Preparation of disaster resilient investment plan for selected utilities;

PPA Strategic Plan Update

- Update the existing PPA strategic plan 2011 – 2016 and prepare concept note for follow up funding to SEIDP & potential new activities/projects;
- Consultant has been recruited to carry out this task;
- Consultations with PPA CEOs & relevant stakeholders during PPA Annual Conference 2018;
- Strategic Plan to be finalised by end of October 2018.

PPA Gender Network

- Encourage gender equality & equity in the power sector and to help utilities build a strong, qualified workforce for the future – with access to the best talent on the market (both men & women).
- Initiative being developed with support from the World Bank Gender team;
- Gender champions have been nominated by utilities to facilitate and promote the PPA Gender Network;



Participating Utilities in remaining project activities

Country	Solar Resource Assessment	Wind Resource Assessment	VRE Grid Integration	Disaster Risk Management	Value of Lost Load
Fiji					
Federated States of Micronesia	✓	✓	✓		✓
Kiribati					✓
Marshall Islands	✓	✓	✓	✓	✓
Nauru	✓				
Palau	✓				
Papua New Guinea	✓			✓	✓
Samoa			✓	✓	
Solomon Islands	✓	✓			✓
Tonga			✓		
Tuvalu	✓	✓	✓	✓	✓
Vanuatu	✓				✓
Cook Islands*				✓	

*Not a WB member but will participate in the study at their own cost

Training Plan 2018/2019

Year	Thematic Area [Tentative date]
2018	<ul style="list-style-type: none">• Benchmarking for Utilities [PPA Conference]• VRE Stakeholder Consultation & Training [September] In-country workshops on the RE & EE Guidelines & Competency Standards [throughout the year]
2019	<ul style="list-style-type: none">• Power System Modelling (Advanced) [March]• Disaster planning [April]• Upper management training on RE investment including power purchase agreements, IPPs etc [June]• Contract/Project Management of RE projects [PPA Conference] In-country workshops on the RE & EE Guidelines & Competency Standards [throughout the year]

Utility Participation

- Encourage active participation of member utilities to provide support & advice to the project including but not limited to:
 - Identifying sites, installation, monitoring, data collection & data validation;
 - Participating in training workshops & courses
 - Providing required information/data to PPA to help with project implementation & activities;

Questions?

- Contact:
- Executive Director – andrewd@ppa.org.fj
- Project Implementation Officer – rapa@ppa.org.fj
- PPA Website – www.ppa.org.fj
 - Note: All project documents and other resources will be made available on the PPA website