INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE

Report No.: ISDSA14508

Date ISDS Prepared/Updated: 11-Aug-2015

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I. BASIC INFORMATION

1. Basic Project Data

Country:	Pacific Islands	**Project ID:**	P152653
Project Name:	Sustainable Energy Industry Development Project (P152653)		
Task Team Leader(s):	Roberto Gabriel Aiello		
Estimated Appraisal Date:		**Estimated Board Date:**	31-Aug-2015
Managing Unit:	GEE02	**Lending Instrument:**	Investment Project Financing
Sector(s):	Other Renewable Energy (75%), General energy sector (25%)		
Theme(s):	Other environment and natural resources management (100%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?	No		
Financing (In USD Million)			
Total Project Cost:	5.66	Total Bank Financing:	0.00
Financing Gap:	0.00		

Financing Source	**Amount**
Borrower	0.00
Strategic Climate Fund Grant	1.92
Energy Sector Management Assistance Program	3.47
Global Facility for Disaster Reduction and Recovery	0.27
Total	5.66

Environmental Category:	B - Partial Assessment
Is this a Repeater project?	No

2. Project Development Objective(s)

The project development objective (PDO) is to increase the data availability and capacity in Pacific Island power utilities to enhance their ability to incorporate and manage renewable energy technologies and long-term disaster risk planning.

3. Project Description

The growth of sustainable energy technologies in the Pacific region has accelerated the need to fill gaps in the establishment and adoption of training standards, installation and design guidelines for renewable energy systems and the powers for the industry to provide self-regulation during this period of rapid growth.

Successful quality driven and sustainable industries require a skilled workforce and appropriate guidelines and standards that the industry applies. Together the Pacific Power Association (PPA) and the Sustainable Energy Industry Association of the Pacific Islands (SEIAPI) have identified a suite of activities to be implemented over the coming four years to support the creation of an enabling environment for renewable energy investments in the Pacific Island Countries (PICs). The proposed projects will increase the understanding and willingness of the PICs' utilities to accept renewable energy systems through a greater understanding of the expected impacts on grid stability, load forecasting as well as to facilitate better knowledge and data sharing. In addition, the project will also lead to consistent competencies amongst practitioners in the field through development of standards and the creation of certification pathways for practitioners to receive formal recognition of their technical training.

A related matter is the ability for the sector to prepare for disaster and climate resilience. The production and distribution infrastructure can be highly vulnerable to the impacts of natural hazards and climate change. These impacts will have consequences for the design, construction, location and operations of power infrastructure.

Overall, the project is expected to have a perpetual positive impact on the social and physical environments in the Pacific. The Pacific has heavy reliance on generation from diesel fuel which is an expensive finite resource and needs to be handled, shipped, stored/distributed all of which have the potential to create substantive environmental harm, particularly in sensitive environments. Analysis of renewable energy opportunities in the Pacific will seek to reduce these costs and environmental risks.

This project has three components:

Component 1: Renewable Energy Resource Mapping Phase 1-3: This component will carry out a resource-mapping assessment of solar and/or wind capacity across 10 PICs. The objective of this component is to enhance awareness and knowledge of governments, utilities and the private sector about the resource potential for renewable technologies (solar and/or wind), and to provide governments with a spatial planning framework to guide investment in the Renewable Energy sector. These resource maps will: (a) provide a detailed assessment for solar and potentially also wind and 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.

The above-mentioned Phases 1-3 of the resource mapping will be undertaken with support from the Energy Sector Management Assistance Program (ESMAP):

- Phase 1 – Project inception, preliminary modeling and implementation planning: Project inception and stakeholder engagement; preparation of an initial resource estimate at the country level

based on a mesoscale model using satellite and reanalysis data; preliminary validation using existing ground-based data; preparations for the implementation of Phase 2;

- Phase 2 – Ground-based data collection: Implementation of a ground-based measurement campaign using high quality measurement devices, with real-time data transmission and reporting, for the purpose of validating and improving the mesoscale model and generating reliable benchmarking data;

- Phase 3 – Production of validated wind resource atlas: Prepare validated resource maps and Atlas reports that describes the final outputs, methodology and process, and includes provision of the final geographic information system (GIS) data.

The activity will ensure the sharing of knowledge about the current existing information and will avoid duplication of data collection. Use of the ESMAP approach will make it possible to continue with the next phases (phases 4 and 5) under a different project if additional funds become available or if the funds alloc ated to phases 1-3 allow to cover additional scope in some islands.

Component 2: Technical Assistance: This component will carry out a program of activities designed to increase capacity within the utilities in 10 PICs and PNG on planning for and management of the integration of variable RE in their systems, data collection and management, and knowledge sharing across jurisdictions. This program of activities will include: (i) acquisition of modeling software and consultancy services for renewable energy integration and capacity building; (ii) development of an online power benchmarking platform; (iii) development of Industry guidelines and competency standards; (iv) training/workshops; (v) power utilities career development assessment plan; and (vi) disaster-recovery and risk-reduction activities.

This component will complement Component 1 by providing training and workshops to power-sector utility staff on technical skills related to renewable energy integration so that they can better use the information that is obtained through the resource mapping component.

Component 3: Project Implementation Support. This component will carry out a program of activities designed to enhance the capacity of PPA for overall project coordination, management and monitoring.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Component 1 (Phases 2 of the ESMAP process) comprises the temporary installation of wind monitoring masts and solar monitoring equipment, but the proposed locations will not be known until the desk-based research under Phase 1 has been completed. They may be located in 10 of the 11 countries. The installation of ground based measurement equipment under Phase 2 of the project is expected to be on Government land but this may not always be the case (for example wind monitoring will depend on the location of the wind resource). Custom or community land may be required temporarily. The Environmental and Social Management Framework (ESMF) has been prepared to inform site selection and the mitigation measures required at each site. Sensitive sites, such as physical cultural resources, nests or productive gardens, can be avoided through the use of the ESMF in the site selection process.

The ESMF also includes methods to identify and minimize impacts during installation, use and decommissioning, and will include voluntary land donation protocols and consultation methods. Potential impacts to be managed are: 1) minimizing vegetation clearance for mast installation and

associated track clearances; 2) ensuring land access is secured in accordance with OP4.12 and OP4.10; 3) avoiding nests, gardens, houses, sites of significance to local people and other physical cultural resources etc.; and 4) ensuring affected parties are consulted and are fully informed of the activity.

Technical Assistance activities under Components 1 and 2 will produce outputs, such as resource maps and training materials, that will influence infrastructure planning and decision making in these countries in future (not funded by this project). Technical Assistance will be guided by ToRs approved by the Bank which will ensure safeguard issues are adequate addressed in activities.

5. Environmental and Social Safeguards Specialists

Penelope Ruth Ferguson (GENDR)

Ross James Butler (GSURR)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	Screening has identified low risk of environmental and social impact, from the installation of wind monitoring masts and solar monitoring equipment, and the indirect implementation of recommendations from Component 1 and 2 (desk-based research and training). The ESMF includes a 'Code of Practice' and a screening checklist to avoid or manage impacts from the siting of the equipment. PPA will ensure that all terms of reference for technical assistance and studies carried out under the Project are consistent with the WB's environmental and social safeguards policies and requirements.
Natural Habitats OP/BP 4.04	No	The footprint of the infrastructure is very small and through the desk top study any natural habitats can be avoided in Component 1.
Forests OP/BP 4.36	No	The footprint of the equipment required in Component 1 is very small and will not adversely affect forested areas or the use of forests.
Pest Management OP 4.09	No	There is no pest management under this project.
Physical Cultural Resources OP/BP 4.11	Yes	The footprint of the equipment required for Component 1 is very small and physical cultural resources can be avoided. Physical cultural resources will be screened as part of site selection, hence the policy is triggered.
Indigenous Peoples OP/ BP 4.10	Yes	Because the project will apply to a number of Countries where Indigenous Peoples reside and have strong relationships with land, OP/BP 4.10 is proposed to be triggered. For the Component 1 land requirements, it is expected that Government land will generally be available, and use of this land will be prioritized, but this may not always be possible. Land acquisition will not be required, but there will be some temporary use of land and this will require either voluntary land donation or

		temporary land lease or similar arrangement; some of this land may be in areas used/inhabited/owned by indigenous communities.
Involuntary Resettlement OP/BP 4.12	Yes	Under Component 1 there will be temporary use of land for wind monitoring masts and solar monitoring equipment. Government land will be prioritized, but if community or custom land is required, a process for consultation and access agreements is required and this will form part of the EMSF as described under 4.01. PPA will ensure that all terms of reference for any technical assistance or studies carried out under the Project are consistent with the requirements of this policy.
Safety of Dams OP/BP 4.37	No	This project does not involve the construction of dams or rely on the performance of an existing dam or a dam under construction.
Projects on International Waterways OP/BP 7.50	No	No studies or activities are proposed international waters.
Projects in Disputed Areas OP/BP 7.60	No	No studies or activities are proposed in disputed areas.

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:
There are no potential large scale, significant and / or irreversible impacts. The site selection and installation of wind monitoring masts will require land, the location of which will be decided during implementation. The footprint is small, and the location of the equipment is flexible to avoid sensitive sites. Some site preparation such as tree trimming or vegetation removal may be required.
2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
The work undertaken under Component 1 will produce recommendations which may result in future renewable energy development in any or all of the 10 PIC's. Because of the influence this project may have on future activities (not funded by this project), the Terms of Reference for the consultant responsible for Component 1 will take into account of the World Bank safeguard policies when making recommendations. Similarly, the training component will influence future activities in the sector. The Terms of Reference for the consultant responsible for training under Component 2 will take into account of the World Bank safeguard policies when preparing and delivering materials.
3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
No project alternatives have been considered.
4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
The PPA will be responsible for the implementation of the ESMF, preparing TOR's for

consultants that include safeguards clauses, and reviewing the consultants' outputs in relation to the TORs and the ESMF. One of the consultants selected to support PPA under Component 3 will require experience in donor safeguards to undertake this role. The World Bank safeguards specialists will assist the PPA team by providing some initial training and assist with the review of TOR, wind mast installation and Consultant's deliverables.
5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.
The key stakeholders and beneficiaries are the energy Ministries and utilities in the 11 countries. They have received the ESMF and attended meetings where PPA presented the project and the ESMF. During implementation the potentially affected people are those who will have a mast installed on their land or neighbouring land. As part of the site screening process, the land owners, occupiers and potentially affected neighbours will be consulted by the technical consultant and / or the in-country utility. Consultation will be free, open and without coercion. Where land is owned communally, the consultant and / or in-country utility carrying out the consultation will ensure that women and young people have equal opportunity to understand the proposal and lease arrangements.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	09-Jul-2015
Date of submission to InfoShop	09-Jul-2015
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	00000000
"In country" Disclosure	
Fiji	09-Jul-2015
Comments: Also disclosed in Pacific Regional Data Repository 'PRDRSE4ALL'.	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	09-Jul-2015
Date of submission to InfoShop	09-Jul-2015
"In country" Disclosure	
Fiji	09-Jul-2015
Comments: Incorporated in the ESMF.	
Indigenous Peoples Development Plan/Framework	
Date of receipt by the Bank	09-Jul-2015
Date of submission to InfoShop	09-Jul-2015
"In country" Disclosure	
Fiji	09-Jul-2015
Comments: Incorporated in the ESMF.	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/ Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [×] No [ ] NA [ ]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [×] No [ ] NA [ ]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [×] No [ ] NA [ ]
OP/BP 4.11 - Physical Cultural Resources	
Does the EA include adequate measures related to cultural property?	Yes [×] No [ ] NA [ ]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [×] No [ ] NA [ ]
OP/BP 4.10 - Indigenous Peoples	
Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?	Yes [ ] No [×] NA [ ]
OP/BP 4.12 - Involuntary Resettlement	
Has a resettlement plan/abbreviated plan/policy framework/ process framework (as appropriate) been prepared?	Yes [×] No [ ] NA [ ]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [×] No [ ] NA [ ]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [×] No [ ] NA [ ]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [×] No [ ] NA [ ]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have costs related to safeguard policy measures been included in the project cost?	Yes [×] No [ ] NA [ ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [×] No [ ] NA [ ]

III. APPROVALS

Task Team Leader(s):	Name: Roberto Gabriel Aiello

Approved By		
Practice Manager/ Manager:	Name: Julia M. Fraser (PMGR)	Date: 11-Aug-2015