



## Regional Sustainable Energy Industry Development Project (P152653)

EAST ASIA AND PACIFIC | Pacific Islands | Energy & Extractives Global Practice |  
Recipient Executed Activities | Investment Project Financing | FY 2016 | Seq No: 8 | ARCHIVED on 19-Jun-2019 | ISR37226 |

Implementing Agencies: Pacific Power Association, Pacific Power Association

### Key Dates

#### Key Project Dates

Bank Approval Date: 29-Sep-2015

Effectiveness Date: 23-Mar-2016

Planned Mid Term Review Date: 28-May-2018

Actual Mid-Term Review Date: 08-May-2018

Original Closing Date: 31-Aug-2020

Revised Closing Date: 31-Aug-2020

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

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

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components

Name

Renewable Energy Resource Mapping Phase 1 to 3:(Cost \$2.27 M)  
Technical Assistance:(Cost \$2.57 M)  
Project Implementation Support:(Cost \$0.82 M)

### Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Satisfactory	● Satisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Satisfactory
Overall Risk Rating	● Moderate	● Moderate

### Implementation Status and Key Decisions

The implementation of the project is progressing, and previous delays in procurement are now largely resolved. The project development objectives are still on track to be achieved. Under Component 1 (Resource Mapping), the Phase 1 Solar and wind resource maps for the Pacific Islands are available online and the inception mission for Phase 2 Renewable Energy Resource Mapping will occur in June 2019.

There is significant progress with Component 2 (Technical Assistance) with the Renewable Energy & Energy Efficiency Guidelines activity progressing well with 4 updated guidelines plus 2 new guidelines and 16 workshops completed in 2018. The software for power system analysis (DigSILENT Power Factory) is available to PPA's member utilities and the online benchmarking platform will be available on the PPA website from July 2019. Disaster risk management activities are progressing well. Two workshops on variable RE grid integration, Energy Storage & SCADA



were conducted in February 2018 and 2019 and the initial Value of Lost Load (VOLL) studies are currently being finalized with further VOLL studies to commence shortly.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	● Moderate	● Moderate	● Moderate
Macroeconomic	● Low	● Low	● Low
Sector Strategies and Policies	● Moderate	● Moderate	● Moderate
Technical Design of Project or Program	● Low	● Low	● Low
Institutional Capacity for Implementation and Sustainability	● Moderate	● Moderate	● Moderate
Fiduciary	● Moderate	● Moderate	● Moderate
Environment and Social	● Low	● Low	● Low
Stakeholders	● Low	● Low	● Low
Other	--	--	--
Overall	● Moderate	● Moderate	● Moderate

## Results

### PDO Indicators by Objectives / Outcomes

To increase the data availability and capacity of power utilities				
▶ Increased public information on RE resources and variability (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021
Comments:	This indicator will measure the increase of public information on RE resources and variability.			
▶ Increased available planning tools and training to both PPA and utilities in the use of these tools (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021



Comments:	This indicator will measure the increase in available planning tools for use by PPA members and training of PPA and utility staff in the use of these tools.			
<b>►Improved technical and institutional capacity of PPA and power utilities (Percentage, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	80.00	100.00	100.00
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021
Comments:	This indicator will measure the improved technical and institutional capacity of power utilities.			
<b>►Increased planning capacity for disaster recovery and risk reduction (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3.00
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021
Comments:	This indicator will measure the number of power utilities that have adopted an investment plan in resilience based on the needs assessment developed through the project.			

### Intermediate Results Indicators by Components

<b>Renewable Energy Resource Mapping Phase 1 to 3</b>				
<b>►Phase 1 (satellite based) resource mapping assessment of solar and/or wind capacity across 10 PICs completed and available (Yes/No, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Aug-2020
Comments:	This indicator will measure completion and availability of resource-mapping assessment of solar and/or wind capacity across all PICs.			
<b>►Phase 2 (ground measurements) resource mapping assessment of solar and/or wind capacity across 10 PICs completed and available (Yes/No, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021
Comments:	This indicator will measure completion and availability of resource-mapping assessment of solar and/or wind capacity across all PICs.			
<b>►Phase 3 (validation) resource mapping assessment of solar and/or wind capacity across 10 PICs completed and available (Yes/No, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes



Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Aug-2020
Comments:	This indicator will measure completion and availability of resource-mapping assessment of solar and/or wind capacity across all PICs.			

Technical Assistance

► Training courses/workshops provided (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	4.80	6.00	6.00
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021

Comments: This indicator will measure the number of workshops provided under the project.

► Planning tool available (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021

Comments: This indicator will measure the availability of a grid-stability modeling planning tool available to power utilities through the PPA.

► Reports on industry guidelines and competency standards available through PPA (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	Yes	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021

Comments: This indicator will measure the number of reports on industry guidelines and competency standards for the selected PICs to consider, which will available through PPA.

► Post-disaster and/or disaster-risk reduction needs assessment developed (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021

Comments: This indicator will measure the number of needs assessments developed for targeted power utilities. The needs assessments will either focus on resilient recovery/reconstruction in post-disaster situations or on disaster-risk reduction and resilience building in normal circumstances (i.e., during "peace" time)

Project Implementation Support

► PPA publishing reports on grievance redress mechanism and how issues were resolved (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
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Value	No	Yes	Yes	Yes
Date	10-Jul-2015	30-Nov-2018	21-May-2019	31-Dec-2021

## Data on Financial Performance

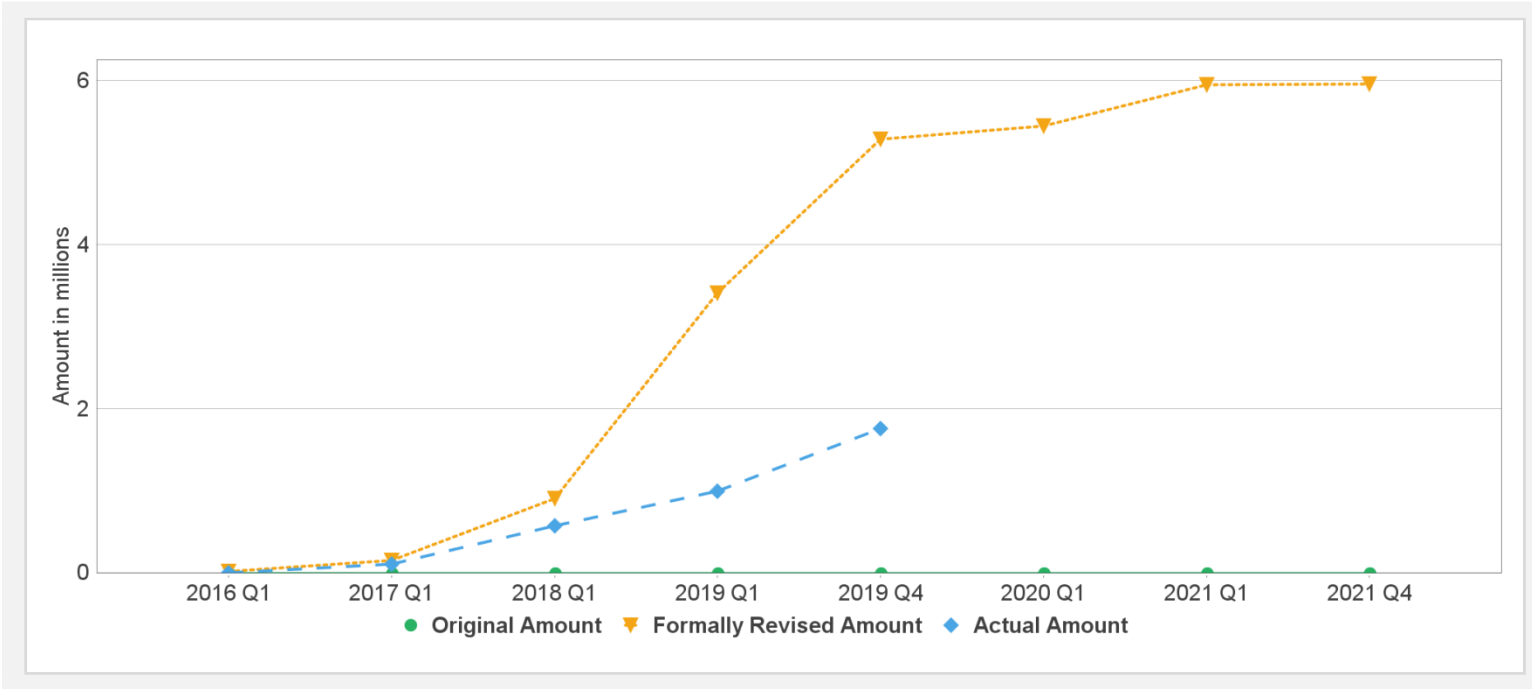
### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P152653	TF-A1235	Effective	USD	1.92	1.92	0.00	1.01	0.91	53%
P152653	TF-A1342	Effective	USD	3.47	3.47	0.00	0.75	2.73	21%
P152653	TF-A1505	Effective	USD	0.27	0.27	0.00	0.00	0.27	0%

### Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P152653	TF-A1235	Effective	03-Dec-2015	03-Dec-2015	23-Mar-2016	31-Aug-2020	31-Aug-2020
P152653	TF-A1342	Effective	03-Dec-2015	03-Dec-2015	23-Mar-2016	31-Dec-2017	30-Dec-2019
P152653	TF-A1505	Effective	03-Dec-2015	03-Dec-2015	23-Mar-2016	30-Jun-2020	30-Jun-2020

### Cumulative Disbursements



## Restructuring History

Level 2 Approved on 15-Dec-2017

## Related Project(s)

There are no related projects.