



Technical Assistance Report

Project Number: 49450-010
Transaction Technical Assistance (TRTA)
November 2017

(REG): Capacity Building and Sector Reform for Renewable Energy Investments in the Pacific

Financed by the Green Climate Fund

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

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Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
CAIDI	–	Customer Average Interruption Duration Index
DMC	–	developing member country
PARD	–	Pacific Department
SAIDI	–	System Average Interruption Duration Index
SAIFI	–	System Average Interruption Frequency Index

NOTE

In this report, "\$" refers to US dollars.

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TRANSACTION TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 49450-010	
Project Name	Capacity Building and Sector Reform for Renewable Energy Investments in the Pacific [formerly Pacific Utility-Sector Reform (GCF Grant)]	Department /Division	PARD/PATE
Nature of Activity	Project Preparation, Capacity Development	Executing Agency	
Modality	Facility		
Country	REG		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
		Total	0.00
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Low
Regional integration (RCI)	Pillar 4: Other regional public goods		
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development Institutional systems and political economy Organizational development Knowledge sharing activities	No gender elements (NGE)	✓
Knowledge solutions (KNS)			
Partnerships (PAR)	Foundations Official cofinancing		
Private sector development (PSD)	Conducive policy and institutional environment Promotion of private sector investment		
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	No	Not Applicable	
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG9		
6. Risk Categorization	Complex		
7. Safeguard Categorization	Safeguard Policy Statement does not apply		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.00	
None		0.00	
Cofinancing		5.00	
Green Climate Fund (Full ADB Administration)		5.00	
Counterpart		0.00	
None		0.00	
Total		5.00	

I. THE ENSUING AND ONGOING PROJECTS

1. The proposed regional transaction TA will provide capacity building and policy advice support to a series of ongoing and ensuing projects, comprising projects included in the indicative project pipeline under the Pacific Renewable Energy Investment Facility¹ (the “Facility”), and other investment projects in energy planned or proposed in COBPs of PARD DMCs. This transaction TA is not, in and of itself, included in any country’s COBP; it is complementary to operations included in such COBPs.

II. THE TECHNICAL ASSISTANCE

A. Justification

2. The proposed regional transaction TA will support the sustainability of energy investments throughout the Pacific, including projects to be implemented under the Pacific Renewable Energy Investment Facility (“the Facility”) and financed by ADB or other sources.

3. The Facility was approved on 22 June 2017 for up to \$200 million to finance a series of individual small-value renewable energy projects in the 11 smaller Pacific island countries (PIC-11), and support regional approaches for energy sector reform, private sector development, and capacity building.

4. The proposed regional transaction TA will support sector reform, private sector development, and capacity building in the PIC-11 countries, as well as in countries other than those covered by the Facility (i.e. non-PIC-11 countries - Fiji, Papua New Guinea, and Timor-Leste).

5. The proposed regional TA is designed to allow for streamlined consultant selection and mobilization, as per Staff Instructions on Business Processes for Transaction Technical Assistance, and will be financed from available resources, including from a grant from the Green Climate Fund approved for \$5 million on 15 December 2016 for these purposes, and administered by ADB. The proposed regional transaction TA will prepare utility reform and capacity building action plans (programs) whose implementation will be financed under ensuing capital investment grants or loans in countries covered under the Facility, or processed separately per customary procedures in countries not covered by the Facility.

6. The provision of adequate electricity service is crucial for ADB’s poverty reduction mandate: economic growth, public health, and general quality of life of our developing member countries’ (DMCs’) populations depends on it. Performance of electric utilities in the Pacific varies greatly from country to country: service is almost universally available in some countries with highly-concentrated populations (e.g. Nauru, Palau, Samoa), while in other countries, service is available in only a few major urban centers accounting for a small percentage of the total population (e.g. Papua New Guinea, Solomon Islands, Vanuatu). Despite this variation in service availability, most Pacific DMC electric utilities share several common features: (i) their financial and operational performance generally fails to provide for *efficient and sustainable* service provision; (ii) they represent a significant and recurrent drain on the public purse or have otherwise significant welfare-diminishing effects due to highly distortionary subsidy and tariff-formation practices; (iii) their legal, policy, and regulatory environments fail to provide adequate stimulus for sector performance improvements and investments (especially from prospective private-sector partners).

¹ <https://www.adb.org/projects/documents/reg-49450-004-rrp>

7. With the exception of Fiji, Pacific DMCs remain heavily dependent on diesel for power generation, which results in high electricity tariffs by international standards with associated negative impacts on economic growth. Expansion of capital-intensive renewable power generation is slow. An overreliance on imported diesel for power generation depletes limited foreign reserves and exposes the region's economies to diesel price shocks. High electricity tariffs increase the cost of business for the private sector and place a strain on household incomes. Although renewable power generation is cost-competitive with diesel generation at current levels of penetration, investment (including from the private sector) is constrained by capacity barriers, a need for sector reform, a lack of financing options.

8. Despite many years of ADB's and other development partners' support for utility services in the Pacific, service quality and reliability remains poor; in several countries, utility service remains unavailable to a significant portion of the population.² Most utilities have not yet achieved their service quality or access objectives, let alone attained financial self-sufficiency. The causes are manifold, but afflict most Pacific utilities similarly, albeit to varying degrees: governance arrangements and regulatory policy do not properly incentivize management to achieve appropriate performance targets; utilities are frequently abused as tools of social policy or to serve short-term political objectives; financial management and accounting practices are not designed or practiced to achieve appropriate outcome targets; management authorities and functions within utilities are poorly defined and often fragmented; utilities' workforces are insufficiently trained, supported, equipped, or incentivized to meet performance expectations, etc.

9. That is not to say that operational and financial sustainability have not been included among stated objectives of ADB's and other development partners' interventions. To the contrary, "capacity-building" is a nearly universal feature of our investment projects' designs, and most often included in the scope of services that implementation consultants are tasked to perform. Typically, capacity-building efforts are undertaken within the context of a discrete investment project's implementation, consisting of the creation of systems and processes within a project management unit (PMU) that is established explicitly for the purpose of supporting that project's implementation. It would appear that the common premise for this approach has been that capacity-building within a PMU will catalyze capacity-development and adoption of sound management practices throughout the utility. In other words, the approach assumes that practices, systems, and processes created for the relevant investment project will be absorbed and adopted for the entire utility, and that the objectives of service quality, availability, and sustainability will thus be achieved. Unfortunately, this has not been observed. More often, assets financed by ADB or other development partners are absorbed into the partner utilities' existing dysfunctional systems, where a "build-neglect-rebuild" approach to infrastructure services - the antithesis of *sustainability* - is common.

10. The persistent poor performance of our Pacific DMCs' electric utilities calls for a different approach to investment in sustainability. Attempting to engender better performance and to transform utilities through project-specific capacity development, or through incremental improvements in discrete aspects of their operations and practices, does not appear to be working. A focused and holistic approach to utility reform is necessary for achievement of *wholesale transformation* of our client utilities, achievement of service quality and availability objectives, and their long-term sustainability.

² See the Pacific Power Association's 2013/2014 Fiscal Year Benchmarking Report of its member utilities' performance. This includes reporting for utilities in Pacific DMCs, with the exception of Timor-Leste.

11. Wholesale reform of our Pacific DMCs' utilities requires a *programmatic approach* tailored to each utility's needs. This must begin with a comprehensive *diagnostic review* of each client utility's operations *and* the environment in which the utility operates. Internal policies and practices (e.g. financial management and accounting, operational procedures, maintenance practices, customer billing systems) *as well as* external factors (e.g. state-owned enterprise governance, regulation, and relevant government policies) need to be thoroughly assessed and understood to determine how deficiencies, gaps, or incongruence in these and related areas combine to impede a utility's performance and achievement of sustainability. It is from here that bespoke reform action plans can be designed for each utility.

12. Investment in utility reform and capacity building is crucial for our Pacific DMCs' ability to realize their development objectives, in particular in an era of heightened sensitivity to energy security and prioritization of transition to renewable energy sources. Mobilizing the significant investments required to effect this transition to capital-intensive renewable electricity generation demands that utilities demonstrate capacity to efficiently operate and maintain their assets, and that they are at once *capable of operating in a financially responsible and sustainable manner*, **and** that the *legal, policy, regulatory, and governance arrangements* in which they operate *allow them to do so*.

13. **Overall outcome.** The proposed regional transaction TA will have the following overall outcome: energy security in targeted countries will be improved through the generation of lower-cost and cleaner energy by sustainable power utilities. The TA will facilitate engagement with governments and electric power utilities to assess policy and institutional barriers to efficient, sustainable sector operations and impediments to increased capital investment, including private sector investment.

B. Outputs and Activities

14. **Output 1: Comprehensive assessment of utilities' operations and performance.** Consultants will document and report on each utility's performance against accepted industry-standard metrics and indicators, such as: SAIDI, SAIFI, CAIDI,³ system load factor, energy losses, revenue per kWh (disaggregated by customer class), debt to total assets ratio, operating and current ratios, debt service coverage ratio, and appropriate labor productivity metrics. (Other indicators and metrics may be identified as appropriate and informative, and can be included.)

15. **Output 2: Review of utilities' business processes, systems, and management practices.** This will include review of utilities' financial management and accounting, customer information and billing systems, budget formulation and execution, asset-management systems and maintenance practices, and customer service policies and practices. The review will also examine higher-level institutional efficiencies, including organizational structure, management hierarchy, decision-making processes, human resource policies and procedures, and the management information system(s) underpinning these processes across the organization.

16. **Output 3: Review of policy, regulatory, and governance arrangements.** Consultants will review coherence of energy-sector policies and their alignment with countries' energy sector development and energy security objectives. Sector regulatory arrangements - in law, policy, and in practice – will be similarly assessed, including as these relate to tariff-setting policies and procedures

³ SAIDI, SAIFI, and CAIDI are indexes that measure electric power utility service reliability. (SAIDI is the *system average interruption duration index*; SAIFI is the *system average interruption frequency index*; and CAIDI is the *customer average interruption duration index*.)

and rate design. Corporate governance arrangements for utilities will also be assessed for their effectiveness in providing utilities' managements with resources and incentives for development and sustainable operation of power utilities consistent with sector policy objectives and applicable legal and regulatory requirements. The Organization for Economic Cooperation and Development's (OECD) Guidelines on Corporate Governance for State-Owned Enterprises will be used as a touchstone for these assessments.

17. **Output 4: Reform recommendations and policy dialogue.** Based on the foregoing reviews, consultants will prepare comprehensive recommendations and action plans to inform policy dialogue with governments, as well as the design of consulting services to support the prescribed reforms, to be included as part of ensuing capital investment projects developed under the Facility, or other investment projects in the DMCs' COBPs.

18. **Output 5: Coordination on reform among regional peers.** Consultants will employ a consistent approach across countries covered under the proposed regional transaction TA. This will enable coordination and cross-learning among utilities across the region, as well as among other development partners. Consultants will coordinate with the Pacific Power Association in disseminating lessons learned among utilities within the region.

C. Cost and Financing

19. The TA is estimated to cost \$5 million, which will be financed on a grant basis by the Green Climate Fund and administered by ADB. The key expenditure items are listed in Appendix 1.

20. Proceeds from the grant from the Green Climate Fund may not be used for project preparation activities such as feasibility studies, environmental and social safeguards documents, financial modeling, and other related activities that are eligible for the GCF Project Preparation Facility. The grant will only be used as a means to strengthen capacity building and sector reform.⁴ Proceeds from the grant may only be used for assistance to countries that have signed a no-objection letter to the program of support approved by the GCF board under which the grant was made, in a form acceptable to the GCF.

21. Governments are expected to provide counterpart support in the form of counterpart staff and other in-kind contributions. Governments are informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

22. The TA activities for an ensuing project start only after the project concept paper on such ensuing project is approved by ADB, and only after submission by the relevant country's government of a no-objection letter, satisfactory in form and substance to the Green Climate Fund, indicating the country's acceptance of grant support from Green Climate Fund for the purposes described herein. Deployment of consultants will generally be scheduled and agreed in parallel with preparation of the relevant ensuing investment project concept paper (or equivalent under the Facility). The schedule

⁴ Green Climate Fund. 2017. Decisions of the Board – 15th meeting of the Board, 13-15 December 2016. Songdo.

of consultant deployment to each country/utility will adjust according to the pace of investment projects' development.

23. ADB will administer the TA.

Table 1: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	January 2018 – December 2022		
Executing agency	ADB		
Implementing agency	ADB		
Consultants	To be selected and engaged by ADB		
	QCBS (firm)	180 person-months	\$5 million
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		

ADB = Asian Development Bank; QCBS = Quality and Cost-Based Selection; TA = Technical Assistance

^a Procurement Plan (accessible from the list of linked documents in Appendix 3).

Source: Asian Development Bank

24. **Consulting services.** ADB will be responsible for selection and supervision of consultants engaged under the TA. ADB will engage a single firm under QCBS on an output-based lump-sum *retainer contract* basis with provision for fixed out-of-pocket expenditures, whereunder successive deployments to individual countries under the TA will follow contract variation orders (VOs) specific to the requirements each deployment. Rates and payment schedules under the first deployment, determined at the time of contract award, will form the basis for successive VOs. Contract value will be advertised at an estimated maximum value of \$5 million. (ADB will retain the option to recruit consultants on an individual consultants selection (ICS) basis to augment the firm selected under QCBS, at the discretion of the responsible ADB project officer.) Consultant areas of expertise will be consistent with activities described in paragraphs 14 through 18, and will include: (i) energy sector policy and strategic planning, (ii) public utility regulation and governance, (iii) electric power utility operations, (iv) financial management and accounting; (v) enterprise resource planning (ERP) and corporate management information systems (MIS) design and implementation, and (vi) business process reengineering. ADB will engage consultants in accordance with ADB Procurement Policy (2017, as amended from time to time) and the associated PAIs/TA Staff Instructions.⁵

25. **Cofinancier requirements.** Reporting, monitoring, and evaluation shall be subject to the provisions of Schedule 4 of the relevant Funded Activity Agreement⁶ between ADB and Green Climate Fund. Prior to first disbursement of funds under the grant, ADB shall submit to Green Climate Fund a monitoring and evaluation plan satisfactory, in form and substance, to Green Climate Fund.

III. THE PRESIDENT'S DECISION

26. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$5 million to Asian Development Bank's Pacific Developing Member Countries to be financed on a grant basis by the Green Climate Fund for Capacity Building and Sector Reform for Renewable Energy Investments in the Pacific, and hereby reports this action to the Board.

⁵ Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 2).

⁶ ADB's Office of the General Counsel is currently negotiating with the Green Climate Fund the Funded Activity Agreement for the proposed TA.

COST ESTIMATES AND FINANCING PLAN

(\$'000)

Item	Amount
A. Green Climate Fund^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	3,600.0
ii. National consultants	360.0
b. Out-of-pocket expenditures	
i. International and local travel	500.0
ii. Training, seminars, and conferences	150.0
2. Contingencies	390.0
Total	5,000.0

Note: The technical assistance (TA) is estimated to cost \$5 million, of which contributions from the Green Climate Fund are presented in the table above. Governments will provide counterpart support in the form of counterpart staff and other in-kind contributions. The value of government contribution is estimated to account for 5% of the total TA cost.

^a Administered by the Asian Development Bank.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=49450-010-TARreport>

1. Terms of Reference for Consultants
2. Approved Report and Recommendation of the President to the Board of Directors for the Pacific Renewable Energy Investment Facility; Project Number 49450-004 ([Proposed Facility Pacific Renewable Energy Investment Facility](#))