Report and Recommendation of the President to the Board of Directors

Project Number: 49450-004
May 2017

Proposed Facility
Pacific Renewable Energy Investment Facility

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
FSU	–	facility support unit
kW	–	kilowatt
kWh	–	kilowatt-hour
MFF	–	multitranche financing facility
MW	–	megawatt
MWh	–	megawatt hour
PIC-11	–	11 smaller Pacific island countries
PIU	–	project implementation unit
SIDS	–	Small Island Developing States
TA	–	technical assistance

NOTE

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

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Director General	X. Yao, Pacific Department (PARD)
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PROJECT AT A GLANCE

1. Basic Data

Project Number: 49450-004

Project Name	Pacific Renewable Energy Investment Facility (formerly Pacific Renewable Energy and Energy Efficiency Investment Facility)	**Department /Division**	PARD/PATE
Country	REG	**Executing Agency**	Asian Development Bank
Borrower	TBD		

2. Sector

	Sector	Subsector(s)	ADB Financing ($ million)
✓	**Energy**	Energy sector development and institutional reform	200.00
		Total	**200.00**

3. Strategic Agenda

Strategic Agenda	Subcomponents
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns
Regional integration (RCI)	Pillar 2: Trade and investment

Climate Change Information

Adaptation ($ million)	20.00
Mitigation ($ million)	140.00
CO_2 reduction (tons per annum)	85,000
Climate Change impact on the Project	Medium

4. Drivers of Change

Drivers of Change	Components
Governance and capacity development (GCD)	Institutional systems and political economy Organizational development
Knowledge solutions (KNS)	Knowledge sharing activities
Partnerships (PAR)	Bilateral institutions (not client government) Commercial cofinancing Private Sector Regional organizations
Private sector development (PSD)	Promotion of private sector investment

Gender Equity and Mainstreaming

No gender elements (NGE) ✓

5. Poverty and SDG Targeting

Geographic Targeting	Yes
Household Targeting	No
SDG Targeting	Yes
SDG Goals	SDG7

Location Impact

Regional: High

6. Risk Categorization: Complex

7. Safeguard Categorization: No Safeguards Categorization available.

8. Financing

Modality and Sources	Amount ($ million)
ADB	**200.00**
Sovereign Multiproject grant: Asian Development Fund	80.00
Sovereign Multiproject (Regular Loan): Ordinary capital resources	10.00
Sovereign Multiproject (Concessional Loan): Ordinary capital resources	110.00
Cofinancing	**500.00**
To be determined - Grant	500.00
Counterpart	**50.00**
Government	50.00
Total	**750.00**

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on the proposed Pacific Renewable Energy Investment Facility. The facility will finance a series of individual small-value renewable energy projects in the 11 smaller Pacific island countries (PIC-11), which have a combined population of fewer than 1.5 million people.[1] The strategic approach of the Asian Development Bank (ADB) to addressing the unique development challenges in the PIC-11 is outlined in the Pacific Approach, 2016–2020.[2] The facility will streamline ADB's internal procedures, enhancing its ability to process small-value projects in the PIC-11 faster and with lower transaction costs. The facility will support the PIC-11 in transforming their power sectors from diesel to sustainable renewable energy generation sources. The facility will support regional approaches for energy sector reform, private sector development, and capacity building.

2. Development of the facility is in response to (i) a growing portfolio of small-value renewable energy projects across the Pacific; and (ii) the need to develop innovative financing models to improve project delivery efficiencies in this particular set of countries, which has specific challenges. The facility will (i) delegate approval of individual project financing to ADB Management of up to $200 million in cumulative ADB financing, in accordance with established eligibility criteria; and (ii) streamline ADB's internal procedures.

II. THE FACILITY

A. Rationale

3. **Sector issues.** The PIC-11 are ADB's smallest member countries by population size, and 10 of the PIC-11 are included in the world's 25 smallest countries. The PIC-11 are members of Small Island Developing States (SIDS), which tend to share similar development challenges, including small populations, limited resources, remoteness, susceptibility to natural disasters, vulnerability to external shocks and excessive dependence on international trade. The SIDS are represented by the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States.

4. Due to the small size of the economies and isolated nature of the islands, the electricity grids of the PIC-11 are relatively small and not suitable for interconnection. The PIC-11 grids have peak loads ranging from 0.8 megawatts (MW) to 22.8 MW across 16 separate power utilities in the 11 countries, with a combined peak load of only 106 MW.[3] The grids are operated by wholly government-owned corporatized power utilities, with the exception of Vanuatu, which has two private sector concessions.

5. The PIC-11 remain heavily dependent on diesel for power generation, which results in high electricity tariffs by international standards (an average of $0.53 per kilowatt-hour [kWh] throughout the PIC-11) with associated negative impacts on economic growth.[4] Uptake of

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[1] The PIC-11 consist of the Cook Islands, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. The PIC-11 do not include the Pacific developing member countries of Fiji, Papua New Guinea, and Timor-Leste.

[2] ADB. 2016. *Pacific Approach, 2016–2020*, Manila. The Pacific Approach is the equivalent of a country partnership strategy for the PIC-11.

[3] For comparison, the peak load is 210 MW in Papua New Guinea and 161 MW in Fiji.

[4] Based on 500 kWh consumption per month. Pacific Power Association. 2016. *Performance Benchmarking Report for Pacific Power Utilities, 2014 Fiscal Year*. *Sydney*. High retail tariffs derive largely from the high cost of power

renewable energy is slow; currently only about 9% of electricity generation in the PIC-11 comes from renewable energy sources. However, this is variable, and 10 out of the 16 utilities have less than 1% penetration.[5] The highest penetration is in Samoa, with 26% integration of renewable energy. An overreliance on imported diesel for power generation depletes limited foreign reserves and exposes the PIC-11 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 the PIC-11 have cost-competitive renewable energy resources, uptake is restricted by capacity barriers, a need for sector reform, a lack of financing options, and limited private sector investment.

6. **Capacity constraints.** Due to the small size of the economies and the power utilities, the PIC-11 face unique capacity constraints. The small size of the public service limits their ability to design and implement renewable energy policies. The small size of the power utilities limits the internal skills available to manage grids, which are moving rapidly from relatively simple single-source generation systems (diesel) to grids that integrate multiple intermittent renewable energy sources.

7. **Need for sector reform.** Sector reform requirements are country dependent and vary across the PIC-11. However, there are common challenges, including the requirement for (i) robust sector planning (road maps and grid integration studies) to ensure prioritization of least-cost investments, (ii) tariff reform to ensure full cost recovery and social protection, (iii) power utility management reform, and (iv) revision of policy and regulatory frameworks to encourage private sector participation.

8. **Lack of financing options.** The investment requirements to undertake the structural shift from diesel generation to renewable energy for the PIC-11 are significant. The small size of the economies and national constraints on sovereign borrowing means that public sector financing is limited. The provision of grant financing has played an important role for pilot projects, but is insufficient to fully fund the structural conversion to renewable energy in the short to medium term. Most PIC-11 governments recognize the important role of private sector investment in providing additional financing and capacity for scaling up renewable energy. Innovative financing modalities will become important to supplement sovereign financing, including the following:

(i) introduction of public private partnerships;
(ii) scaling up of investment by independent power producers (IPPs), including innovative models such as pay-as-you-go modalities;
(iii) crowding in commercial financing through guarantee products; and
(iv) alternative delivery models, such as output-based aid.

9. **Barriers to private sector investment.** Private sector investment in the PIC-11 energy sector is currently limited. There are currently 11 small IPPs in 5 of the PIC-11, largely concentrated in Polynesia (the Cook Islands, Samoa, and Tonga). Barriers to private sector investment include the following:

(i) small project size, unfamiliarity with the country and cost of doing business, and lack of follow-on business opportunities;
(ii) risks associated with land access, particularly for customary ownership;
(iii) uncertain regulatory environment;

generation, which itself is a consequence of a high reliance on diesel for generation: the remoteness of the PIC-11 increases the cost of diesel delivery, while relatively small engine sizes increase per kWh fuel consumption.

[5] Pacific Power Association. 2016. *Performance Benchmarking Report for Pacific Power Utilities*, *2014 Fiscal Year Sydney*.

(iv) high financing costs and difficulty in obtaining financing, particularly local currency financing;
(v) payment risk due to financial weakness of many power utilities; and
(vi) low capacity of governments and utilities to negotiate and implement power purchase agreements.

10. **Approach to sector issues.** The PIC-11 recognize the need to structurally shift power generation from diesel to renewable energy and have achieved the following:

(i) established aggressive national renewable energy targets of 20%–100%;
(ii) developed energy policies, which prioritize sector reform activities and renewable energy investments;
(iii) gained experience in integration of renewable energy into the grid through construction of initial small intermittent renewable energy projects (mainly solar and wind);
(iv) demonstrated their commitment through submission of nationally determined contributions for greenhouse gas emission reductions under the United Nations Framework Convention on Climate Change; and
(v) supported the regional Framework for Action on Energy Security in the Pacific (FAESP), which was endorsed by Pacific leaders in 2010.[6] The FAESP outlines a regional energy plan to achieve secured supply, efficient production, and use of energy for sustainable development through (a) leadership, governance, coordination, and partnerships; (b) capacity development, planning, and policy and regulatory frameworks; (c) energy production and supply; (d) energy conversion; (e) end-use energy consumption; (f) energy data and information; and (g) financing, monitoring, and evaluation.

11. **Growing demand for small-value projects.** ADB has responded to the increased demand for renewable energy investments and is currently the largest investor in renewable energy in the Pacific. ADB is currently supporting nine energy sector projects (mainly renewable energy) in the PIC-11 (total cost $244 million), with an average size of $27 million, including an average ADB investment of $12 million. In the pipeline, 13 projects are planned for the PIC-11 during 2017–2019 (total estimated cost $377 million), with an average size of $29 million, including an average ADB investment of $5 million. This represents a 260% increase in projected investment flow to the sector. While this demonstrates a significant increase in the renewable energy portfolio, the average project size remains small. ADB financing per project is anticipated to be less than $20 million per project.[7] Additionally, the scope of each renewable energy project is generally similar, mainly consisting of small-scale solar power, wind power, hydropower, and rehabilitation of supporting infrastructure.

12. Although small-value projects in the PIC-11 are similar in scope, ADB is currently preparing each project under separate technical assistance (TA) projects and processing each loan separately. This has resulted in operational inefficiencies such as (i) similar documentation at the project concept paper stage, (ii) recruitment of different consulting firms for each project to perform similar activities, and (iii) identical transaction costs and timelines as larger projects despite the smaller financing amounts.

[6] Secretariat of the Pacific Community. 2011. *Framework for Action on Energy Security in the Pacific, 2010–2020*, Suva. The FAESP was endorsed by Pacific island leaders at the 41st Pacific Islands Forum, Vanuatu, 4–5 August 2010. The FAESP will be updated in 2019 to cover the period 2020–2030.
[7] The largest ADB financing for a pipelined energy project is $14 million.

13. **Programmatic approach for project preparation and capacity development.** As the first step to address inefficiencies in consultant recruitment, and to support the facility, ADB approved a regional TA of $5 million in November 2016 to prepare small-value renewable energy projects taking a programmatic approach.[8] The regional TA will initially recruit a single team of consultants to develop projects in the first three PIC-11 countries under the facility (the Cook Islands, Tonga, and the Federated States of Micronesia) and conduct sector reform and capacity building activities. The regional TA will:

(i) conduct project due diligence and prepare feasibility studies, detailed engineering design, and bidding documents;
(ii) implement energy sector reform, including sector planning (road maps and grid integration studies), power utility management reform and capacity building, and tariff review and reform;
(iii) review and revise regulatory and policy frameworks;
(iv) promote private sector participation by screening opportunities for IPPs, providing transaction advice, and designing guarantee products; and
(v) disseminate best practices to and share lessons learned with officials from PIC-11 governments and power utilities.

14. The programmatic approach to project preparation has already streamlined consultant recruitment for projects in the Cook Islands, Tonga, and the Federated States of Micronesia. ADB also secured an additional $5 million grant from the Green Climate Fund in December 2016 to support energy sector reform and capacity building under the programmatic approach for the PIC-11.

15. **Assessment of existing financing modalities.** ADB has assessed available existing financing modalities, including regional multitranche financing facility (MFF), sector loans, and project loans, to finance a series of renewable energy projects in multiple countries in the Pacific. They have been found to be unsuitable. In particular, the MFF was found to involve substantial challenges in processing and implementation due to the application of MFF requirements in a regional context, including the need for a regional sector road map, country-level policy frameworks, and a regional framework financing agreement to be signed with all PIC-11 countries. Consequently, it is more difficult to realize the efficiency gains associated with MFFs in a multi-country MFF.

16. The policy paper on Enhancing Operational Efficiency of ADB envisaged a financing facility which may include a pipeline of small loans—particularly for a group of member countries in a small region and/or in fragile and conflict-affected situations—which is submitted as a strategic package for ADB's Board of Directors' approval, with each financing proposal under the facility to be approved by the President.[9] Such an approach fits the PIC-11 context; the Pacific Approach calls for flexibility in processes, project duration, and approach as well as prioritizing cost reductions by harnessing renewable energy to drive down the cost of electricity and fossil fuel imports.

[8] ADB. 2016. *Technical Assistance for Preparing the Pacific Renewable Energy Investment Facility*. Manila.
[9] ADB. 2015. *Enhancing Operational Efficiency of the Asian Development Bank*. Manila.

17. **A novel financing approach.** To finance the large number of small-value renewable energy projects in the PIC-11, ADB proposes the Pacific Renewable Energy Investment Facility.[10] The facility provides an aggregated approval limit under which the President is authorized to approve loans and grants to a range of qualifying small-value renewable energy projects in the PIC-11 from 2017 to 2022. The facility will support investment in a range of renewable energy projects, which will benefit the PIC-11 economies through (i) improved balance of trade by reducing fossil fuel imports, (ii) improved energy security, (iii) downward pressure on tariffs, and (iv) reduced greenhouse emissions.[11]

18. **Streamlined processes.** The facility will allow ADB to significantly increase its support for the development of renewable energy in the PIC-11 by (i) scaling up financing through improved leveraging of cofinancing, promotion of the private sector, and development of innovative financing modalities; (ii) providing systematic medium-term support for sector reform; and (iii) improving efficiencies of project processing by streamlining internal processes. Working on a programmatic basis across the entire sector allows for a range of regional benefits not available on a project-by-project basis (para 21-28). The facility will provide a range of benefits to the PIC-11, including the following:

(i) faster achievement of renewable energy targets;
(ii) increased resources (financial and TA) to implement national renewable energy targets;
(iii) increased access to TA for implementation of reform agendas;
(iv) benefits from faster and more efficient processing of financing; and
(v) improved access to lessons learned, and increased awareness of successful projects in other PIC-11 countries.

19. The proposed implementation arrangements are detailed in section E. It is estimated that the facility will result in (i) an increase in the number of energy projects processed annually in the PIC-11 by one-third, (ii) a reduction in the staff time spent on consultant recruitment by half, and (iii) a reduction of project processing time by one-third.

B. Impact and Outcome

20. The impact will be improved regional energy security in the Pacific, as stated under the FAESP. The outcome will be increased generation of lower-cost and cleaner energy.[12] An indicative outline of projects, including anticipated year of approval and scope, is in the indicative project pipeline.[13]

C. Outputs

21. **Output 1: Renewable energy generation facilities and supporting infrastructure constructed and/or rehabilitated.** Output 1 will support an estimated 20 separate renewable

[10] In preparation of the facility, the design of the Faster Approach to Small Nonsovereign Transactions facility was also considered. ADB. 2015. *Faster Approach to Small Nonsovereign Transactions.* Manila.
[11] Renewable energy investments supported by the facility will have the lowest levelized cost of energy amongst generation options, incorporating life cycle costs and Value for Money. Recent experience in the Pacific in financing renewable energy infrastructure indicates that renewable energy is often lower cost than diesel generation.
[12] The design and monitoring framework is in Appendix 1.
[13] Indicative Project Pipeline (accessible from the list of linked documents in Appendix 2).

energy and supporting infrastructure projects in the PIC-11 over a 5-year period.[14] It is estimated to include the following:

(i) 80 MW of solar, wind, and hydropower generation capacity installed;[15]
(ii) 30 MW-hours of battery storage installed;
(iii) 300 kilometers of transmission and distribution network constructed or rehabilitated;
(iv) five diesel plants refurbished to improve efficiency; and
(v) four rural electrification projects installed (hybrid solar systems and distribution expansion).

22. Details of the first three projects proposed for approval under the facility in 2017 are summarized in paras. 23–25 and outlined in the indicative project pipeline, which also provides the indicative projects to be financed under the facility.

23. **Project 1: Cook Islands, Renewable Energy Sector Project (Additional Financing).** The project will support the installation of battery storage on the Rarotonga grid to scale up renewable energy, including (i) battery storage for grid stability, (ii) battery storage for load shifting capability, and (iii) capacity building. This will result in 6 MW of solar power through private sector investment, which will increase renewable energy to approximately 50%. The project is included in the Cook Islands Renewable Energy Chart and Implementation Plan, which targets 100% renewable energy by 2020. Total project costs are $16 million, including $12 million from GCF (approved in December 2016) and $4 million government counterpart. While due diligence is still ongoing, the project is expected to be economically viable. ADB Management approval is scheduled for August 2017. Safeguard categorizations are B for environment, B for involuntary resettlement, and C for indigenous peoples.

24. **Project 2: Tonga, Outer Island Renewable Energy Project (Additional Financing).** The project will support the construction of a solar mini-grid system on Niuatoputapu of the Niua group. The project is included in the Tonga Energy Road Map, 2010–2020, which establishes the national target of generating 50% renewable energy by 2020. Total project costs are $6.89 million, to be financed by a Global Environment Fund grant ($2.89 million, approved in April 2016), ADB's Concessional Ordinary Capital Resources Loans ($1.5 million), an Asian Development Fund grant ($1.5 million), and cofinancing ($1 million). Due diligence is ongoing and ADB Management approval is scheduled for September 2017. Safeguard categorizations are B for environment, C for involuntary resettlement, and C for indigenous peoples.

25. **Project 3: Vanuatu, Energy Access Project.** The project will increase energy access and renewable energy generation on the two islands of Espiritu Santo and Malekula. The outputs include (i) Brenwe Hydropower Plant (400 kilowatts), (ii) distribution extension, and (iii) capacity building. The project is a priority under the Vanuatu National Energy Road Map 2014. Total project costs are $15.1 million, to be funded by the Strategic Climate Fund ($7 million), ADB's Concessional Ordinary Capital Resources Loans ($2.5 million), an Asian Development Fund grant ($2.5 million), and government ($3.1 million). Due diligence is substantially completed. The project is economically viable. ADB Management approval is scheduled for August 2017. Safeguard categorizations are B for environment, B for involuntary resettlement, and C for indigenous peoples.

[14] Supporting infrastructure will include investments to increase energy access.
[15] Demand-side energy efficiency management will be mainstreamed in parallel with design of new generation.

26. **Output 2: Energy sector reform and capacity building undertaken.** This output, which includes promotion of private sector, will be financed by a regional project preparatory TA.

27. The facility will support sector reform and capacity building through the following:

(i) **Systematic medium-term reform dialogue and support.** The facility will support systematic assessments of sector reform priorities, and undertake medium-term sector reform dialogue, as opposed to short-term dialogue on a project-by-project basis. TA will be provided over the medium term (3–5 years) for PIC-11 reform priorities. Reform dialogue will include sector planning (road maps and grid integration studies), power utility management reform, tariff review and reform, and regulatory and policy framework reform.

(ii) **Coordinated reform agendas.** The facility will document reform priorities in each participating PIC-11 and hold workshops with development partners to promote a uniform understanding on proposed reform pathways.

(iii) **Support for regional initiatives.** The facility will support targeted regional initiatives, which support sector reforms outlined in the FAESP, and the establishment of an energy regulators association.

(iv) **Sharing of lessons learned**. The facility offers enhanced opportunities for sharing of lessons learned among the PIC-11. This will be facilitated by the regional facility support unit (FSU) and enhanced through regional workshops and knowledge products.

28. The facility will support private sector investments through the following:

(i) **Systematic screening.** Opportunities for IPPs will be systematically screened across all participating PIC-11. This will include targeting sovereign financing on infrastructure to accommodate private sector investment.

(ii) **Bundling of procurement.** Opportunities will be explored for bundling of procurement across the PIC-11 to increase contract size and attract new investors and contractors to the PIC-11. Bundling across the PIC-11 may be particularly useful for IPPs and engineering, procurement, and construction contractors.

(iii) **Outreach.** Outreach will be conducted across the PIC-11 to encourage private sector investment to the region by supporting regional events such as the Pacific Energy Investors Forum (held during the Pacific Power Association Annual Conference) and developing outreach tools to reach potential investors. Conducting regional outreach encourages investors to view the Pacific as a single region, rather than a series of small individual countries.

(iv) **Regional guarantee fund.** Options for a regional guarantee facility will be explored to reduce payment risk for IPPs, lower their cost of capital, and ultimately lower the negotiated off-take tariffs, which will benefit the PIC-11.

D. Summary Cost Estimates and Financing Plan

29. The facility will finance renewable energy projects with an overall estimated cost of $750 million, including an estimated $500 million from cofinancing sources and an estimated $50 million from government counterpart financing. ADB financing is up to $200 million and is estimated to consist of an approximately $10 million loan from ADB's regular ordinary capital resources, approximately $110 million in loans from ADB's concessional ordinary capital resources, and approximately $80 million in grants from ADB's Special Funds resources (Asian Development Fund). In addition, the facility will leverage private sector investment through sector reform, capacity building and targeted sovereign investments. Specific project allocations will be subject to country performance-based allocations and country-specific programming discussions, subject

to the $200 million maximum for the facility across all PIC-11 countries. The summary financing plan is in Table 1. Detailed cost estimates by expenditure category and by financier will be included in the project administration manual for each individual project. Climate mitigation and adaptation costs will be estimated during project preparation and also detailed in the project administration manual for each project. Cofinancing allocations are indicative only and will be confirmed prior to project approval.

Table 1: Summary Financing Plan

Source	Amount ($ million)	Share of Total (%)
Asian Development Bank[a.]		
Ordinary capital resources (regular loans)	10.0	1.3
Ordinary capital resources (concessional loans)	110.0	14.7
Special Funds resources (Asian Development Fund grants)	80.0	10.7
Cofinancing[b.]	500.0	66.7
Government	50.0	6.6
Total	**750.0**	**100.0**

[a.] The breakdown between financing sources is an estimate.
[b.] Estimate based on current cofinancing projections. Cofinancing will be developed and reported on a per project basis. Cofinancing and government contributions may exceed estimates in Table 1.
Source: Asian Development Bank estimates.

E. Implementation Arrangements

30. The implementation period for the facility will be over an 8-year period from July 2017 to July 2025. ADB will receive funding proposals over a 5-year period from July 2017 to July 2022. The deadline for the final approval of the funding proposals under the facility will be 29 July 2022.[16] The facility will delegate approval of individual project financing to ADB Management of up to $200 million in cumulative ADB financing, in accordance with established eligibility criteria. Multiple projects in a single country may be approved. There is no financing cap on an individual country within the cumulative approval threshold. Additional financing may be included under the facility. Regional projects may also be considered across multiple PIC-11 countries. There will be no limit for cofinancing or government contributions.

31. It is proposed that the Board delegate approval to the President for loans and/or grants to each PIC for qualifying projects under the facility. Project qualifying criteria consist of the following:

(i) project scope includes renewable energy generation and supporting energy sector infrastructure,[17]
(ii) project is in one of the PIC-11,
(iii) project is included in national energy sector planning documents as a priority investment, and

[16] The period between final approval of funding proposals (29 July 2022) and the end of the implementation period of the facility (July 2015) is considered sufficient for final project implementation. However, should implementation of the final project require additional time, the implementation period for the facility may be extended to cover the final project's implementation.
[17] Supporting infrastructure includes the required power sector infrastructure to maintain grid operation. This includes, but is not limited to, transmission and distribution assets, diesel generation rehabilitation and upgrades, and rehabilitation of tank farm assets.

(iv) environment category A projects are excluded in general.[18]

32. The President will consider and, if appropriate, approve the financing of each qualifying project based on a facility financing proposal.[19] The format of the facility financing proposal will be the same as that of the report and recommendation of the President for a sovereign project. Project processing and due diligence will be carried out following existing operations manuals and staff instructions, primarily for stand-alone projects.[20]

33. The facility financing proposal for each project will be disclosed to the public in accordance with ADB's Public Communications Policy 2011. ADB will report progress on facility implementation annually to the Board. Prior to 31 July 2020 or when 50% of the $200 million approval limit has been utilized, whichever occurs first, ADB will conduct an interim review of the facility and report to the Board, including recommendations for design modifications (if any).

34. An FSU will be established in ADB headquarters to support the design and implementation of the facility, including preparation of projects. The FSU will include consultants financed by the regional project preparatory TA. Project implementation units (PIUs) will be established within the implementing agencies in each participating country. In support of project preparation, the FSU will (i) oversee the consulting firm(s); (ii) support the national PIUs, including in the sharing of lessons learned between PIUs; (iii) provide independent technical review of feasibility and detailed design; (iv) monitor and report on processing and implementation progress; and (v) support energy sector reform, including (a) sector planning (road maps and grid integration studies), (b) power utility management reform and capacity building, (c) tariff review and reform, (d) review and revision of regulatory and policy frameworks, and (e) promotion of the private sector, as appropriate. A project steering committee will oversee implementation, monitor progress, and provide guidance to the executing agency in each participating country.

35. For projects where ADB will be administering cofinancing resources, universal procurement will apply.[21] Retroactive financing and/or advance contracting will be considered on a project-by-project basis. The loan and grant proceeds will be disbursed following ADB's *Loan Disbursement Handbook* (2015, as amended from time to time) and detailed arrangements agreed between the government and ADB.

36. Preparation of the initial projects under the facility will be supported through a regional TA (footnote 8). This TA will be expanded to cover preparation of the subsequent projects.[22] The regional TA will support (i) project preparation, including due diligence and feasibility studies; and (ii) implementation, consisting of detailed design and project procurement. Construction supervision will be supported under the individual projects. All consultants will be recruited in

[18] In the event that there is an environment category A project, a paper will be submitted to the Board for its decision whether to authorize the President to approve the financing for the project. This is similar to the approach for MFF second or subsequent tranches that are environment category A.

[19] The format for the facility financing proposal will follow the format for the sovereign project loan report and recommendation of the President.

[20] Specific processing procedures are described in the Project Processing Flowchart (accessible from the list of linked documents in Appendix 2).

[21] ADB. 2013. *Blanket Waiver of Member Country Procurement Eligibility Restrictions in Cases of Cofinancing for Operations Financed from Asian Development Fund Resources*. Manila; ADB. 2015. *Enhancing Operational Efficiency of the Asian Development Bank.* Manila.

[22] A summary of anticipated projects is included in the Indicative Project Pipeline (accessible from the list of linked documents in Appendix 2).

accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

III. DUE DILIGENCE AND BUSINESS PROCESS

37. With the exception of project concept clearance, the procedures for financing projects under the facility will follow those for the processing of stand-alone or sector projects. Due diligence will be carried out on each project in accordance with ADB policies and procedures, and the results of the due diligence summarized in the facility financing proposals. Due diligence will include technical, economic, financial, governance (including financial management risk categorization), integrity, gender, and climate change impacts. Innovative technical solutions will be incorporated, where appropriate.[23] A risk management assessment and risk management plan will be prepared for each project. For safeguards due diligence, each project will be screened and categorized separately at the outset of project preparation for environment, involuntary resettlement, and indigenous peoples, in compliance with ADB's Safeguard Policy Statement (2009). The safeguard categorization will subsequently guide the preparation of appropriate safeguard assessment documentation. The facility is expected to support mainly category B and C projects.[24]

IV. RECOMMENDATION

38. I am satisfied that the proposed Pacific Renewable Energy Investment Facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

(i) the Pacific Renewable Energy Investment Facility in an aggregate principal amount not exceeding the equivalent of $200,000,000; and

(ii) the delegation of authority to the President for approval of the loans and/or grants under the Pacific Renewable Energy Investment Facility as described in paragraph 30 of this report.

Takehiko Nakao
President

30 May 2017

[23] Innovative solutions may include micro-grids and energy management systems.
[24] See footnote 18 on the approach to projects that are classified as category A for environmental impact.

DESIGN AND MONITORING FRAMEWORK

Impact the Facility is Aligned with

Regional energy security in the Pacific is improved (Framework for Action on Energy Security in the Pacific, 2010–2020)[a]

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Generation of lower-cost and cleaner energy increased	By June 2025 a. Renewable energy generation as percentage of power generation increased to 30% (2016 baseline: 8.9%) b. 85,000 tons carbon dioxide equivalent per annum avoided compared with January 2017	a. Utility annual corporate reports b. National PIU quarterly reports	Utilities do not maintain sufficient technical staff to operate and maintain renewable facilities. Extended droughts affect hydropower utilization. PIC-11 do not maintain commitment to reform.
Outputs 1. Renewable energy generation facilities and supporting infrastructure constructed and/or rehabilitated	1a. 80 megawatts of renewable energy generation commissioned by June 2025 (new and rehabilitated) 1b. 30 megawatt-hours of battery storage installed by June 2025 1c. 300 kilometers of transmission and distribution network constructed by June 2025	1a. Utility annual corporate report 1b. National PIU quarterly reports 1c. National PIU quarterly reports	Changes in the political landscape negatively affect commitments of the project cofinancier.
2. Energy sector reform and capacity building undertaken	2a. Reform documents submitted for approval to the relevant authority in four countries by June 2025 2b. One risk guarantee product approved by December 2020 2c. 100 workshop participants' reporting skills on renewable energy integration improved	2a. National PIU quarterly reports 2b. Utility annual corporate report 2c. Utility annual corporate report	

Key Activities with Milestones

1. Renewable energy generation facilities and supporting infrastructure constructed and/or rehabilitated
1.1 Procure consultants prior to Board approval for individual projects
1.2 Commence community consultations by national PIU (with minimum 30% women participating)

Key Activities with Milestones
immediately after Board approval for individual projects 1.3 Complete land acquisition by Board approval for individual projects 1.4 Award main construction contracts within 9 months of effectiveness of individual projects 2. Energy sector reform and capacity building undertaken 2.1 Provide support for sector planning for four PIC-11 by July 2022 2.2 Provide power utility management reform and capacity building to seven PIC-11 by July 2022 2.3 Conduct tariff review and reform in two PIC-11 by July 2022 2.4 Review and revise regulatory and policy frameworks in two PIC-11 by July 2022 2.5 Promote private sector in seven PIC-11 by identifying opportunities for independent power providers across all participating PIC-11 and designing guarantee products by July 2022
Inputs (estimated) Asian Development Bank: $200 million Government: $50 million Other cofinanciers: $500 million

PIC-11 = 11 smaller Pacific countries, PIU = project implementation unit.

[a] Secretariat of the Pacific Community. 2011. *Framework for Action on Energy Security in the Pacific, 2010–2020*. Suva.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=49450-004-3

1. Sector Assessment (Summary): Energy
2. Indicative Project Pipeline
3. Project Processing Procedures