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Asian Development Bank
ABBREVIATIONS

ADB – Asian Development Bank
COVID-19 – coronavirus disease
DMC – developing member country
DMF – design and monitoring framework
PARD – Pacific Department
PPA – power purchase agreement
PREP – Pacific Renewable Energy Program
PRG – partial risk guarantee
PSOD – Private Sector Operations Department

NOTE

In this report, "$" refers to United States dollars.

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<tr>
<th>Vice-Presidents</th>
<th>Ashok Lavasa, Office of the Vice-President (Market Solutions)</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Ahmed M. Saeed, Office of the Vice-President (East and Southeast Asia, and the Pacific)</td>
</tr>
<tr>
<td>Directors General</td>
<td>Suzanne C. Gaboury, Private Sector Operations Department (PSOD)</td>
</tr>
<tr>
<td></td>
<td>Leah C. Gutierrez, Pacific Department (PARD)</td>
</tr>
<tr>
<td>Deputy Directors General</td>
<td>Cathy Marsh, PSOD</td>
</tr>
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<td></td>
<td>Hideaki Iwasaki, PARD</td>
</tr>
<tr>
<td>Senior Advisor</td>
<td>Craig Roberts, PSOD</td>
</tr>
<tr>
<td>Directors</td>
<td>Jackie B. Surtani, Infrastructure Finance Division 2 (PSIF2), PSOD</td>
</tr>
<tr>
<td></td>
<td>Mukhtor Khamudkhanov, Energy Sector Office (SG-ENE), Sectors Group (SG)</td>
</tr>
<tr>
<td>Team leaders</td>
<td>Alix Burrell, Principal Investment Specialist, PSIF2, PSOD</td>
</tr>
<tr>
<td></td>
<td>Woo Yul Lee, Principal Energy Specialist, SG-ENE, SG</td>
</tr>
<tr>
<td>Team member</td>
<td>Alexander Jett, Senior Investment Specialist, Office of the Director General-Guarantees and Syndications Unit, PSOD</td>
</tr>
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I. INTRODUCTION

1. The Pacific Renewable Energy Program (PREP) provides an umbrella facility of up to $100 million of financing support, including loans, guarantees, and letters of credit, to overcome the constraints to private sector investment in renewable energy projects in Pacific developing member countries (DMCs). The PREP was jointly developed by Asian Development Bank’s (ADB) Private Sector Operations Department (PSOD) and Pacific Department (PARD). PSOD oversees implementation, monitors the portfolio’s progress, and prepares periodic program progress reports to development partners as required. This is the fourth annual progress report covering the 12 months from 1 January 2022 to 31 December 2022.²

II. PROGRAM SUMMARY

A. Overview

2. The ADB Board of Directors approved the PREP on 17 April 2019. PSOD and PARD jointly developed the PREP under a “One ADB” approach. This approach leverages PARD’s close relationship with the Pacific power utilities. The development of a regional guarantee program is an output indicator of the Pacific Renewable Energy Investment Facility, designed to support ADB investment in sovereign renewable energy projects in the smallest 11 Pacific DMCs and to assist in sector reform.³ The facility identified a donor-backed guarantee program as a key activity to promote private investment in the Pacific energy sector as part of the sector reform agenda. The design for each project under the PREP includes one or more of the following forms of financing support:

(i) A partial risk guarantee (PRG) covering standard political risks and breaches of a contract under a power purchase agreement (PPA), which includes coverage of failure by the utility to make a termination payment in the event of full default by the power utility, as set out in the PPA.⁴ Payment for breach of contract is made under the PRG upon arbitral award.⁵

(ii) A direct loan provided to support a private sector borrower, or, where ADB cannot fund a loan in a local currency, then an ADB partial credit guarantee benefiting one or more local lenders to the project may be made available to an independent power producer instead of a direct loan.

(iii) A letter of credit facility to cover short-term liquidity risk is to be drawable by the independent power producer in an amount covering payments due under the PPA for a specific period. ADB may arrange for a maximum period of 24 months of PPA payments per project. The letter of credit will cover the risk that a power utility, as an off-taker, fails to make payments to the project following the terms of the PPA, and the letter of credit will be reinstated once the utility has restored the outstanding payments. The letter of credit, if provided, will be fully funded by development partner funds.

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² PSOD and PARD are required to report progress in program implementation annually to the ADB Board of Directors (calendar year).
⁴ Expropriation, inconvertibility/nontransferability, war and civil disturbance, and breach of contract.
⁵ The PRG will not cover PSOD lending.
(iv) Technical assistance for transaction advisory support and streamlined processes to reduce high transaction costs associated with relatively small transaction sizes in the Pacific and to assist with capacity building in environmental and social safeguards.

B. Planned Impact, Outcome, and Output

3. **Impact and outcome.** The impact is increased renewable energy generation in the Pacific, as stated under the Framework for Action on Energy Security in the Pacific 2010–2020. The outcome is increased private sector investment in renewable energy in the Pacific.\(^6\)

4. **Output.** The output is the successful establishment of the PREP. This output will support an estimated five separate renewable energy projects in the Pacific DMCs over a 5-year period.\(^7\)

III. PROGRESS ON ACHIEVING PROGRAM OUTPUTS

5. **Progress of PREP and anchor project.** The PREP was well received on inception, and project financing transactions were underway. However, no project has been signed to date. On 21 June 2021, the ADB President approved (i) a loan of $3.0 million from ordinary capital resources and (ii) administration of up to $2.0 million from the PREP for the letter of credit facility for the Hihifo 6-megawatt (MW) solar project in Tonga, which is an anchor project of the PREP.\(^8\) In addition to the two previous delays (footnote 8), the eruption of the Hunga Tonga Hunga Haʻapai submarine volcano on 22 January 2022 caused a further delay. The eruption was a once-in-a-thousand-year event, with heavy ashfall causing damage to solar panels at completed project sites.\(^9\) The financing was therefore re-scheduled to close in the first half of 2022. However, the restrictions imposed in February 2022 due to the more severe coronavirus disease (COVID-19) outbreak in Tonga that was lifted only in September 2022, and the clean-up delay of the damages from the eruption further postponed project commissioning to December 2022. Unfortunately, interest rates increased rapidly during 2022. The sponsor decided not to commit to the financing offered by ADB and Japan International Cooperation Agency because the swap rates resulted in a fixed interest rate that significantly exceeded the internal rate of return of the project.

6. **Lessons Learned.** The following lessons have been learned since the inception of the PREP:

   (i) **High transaction costs.** The transaction costs of using a project financing modality and the costs of using the proposed letter of credit under the PREP are high for small-scale renewable energy projects in the Pacific.

   (ii) **Limited markets.** Privately financed renewable energy transactions have been initiated in fewer Pacific DMCs (about 5 out of 14 DMCs) than anticipated.

   (iii) **New trends.** Because of the COVID-19 pandemic, many DMCs in the Pacific have failed or may fail to meet their timebound renewable energy targets. Therefore, some of them have tried to meet their remaining renewable energy targets through a single, very large-scale transaction instead of multiple small-scale transactions,

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\(^6\) The design and monitoring framework is in the appendix.

\(^7\) By comparison, PSOD has only invested in one energy sector project in the Pacific.

\(^8\) The financing was originally anticipated to close in 2019. However, the investor sold the majority of its shares to a new investor, which delayed the financing process by 7 months. Restrictions due to the COVID-19 pandemic caused another 18 months delay in the financing process following the adjusted project commercial operation date scheduled for the first half of 2022.

\(^9\) About 10% of the solar panels were damaged and the sites were covered in volcanic ash.
with assistance from international transaction advisors, which requires more robust credit enhancement (e.g., full government guarantees on a power purchase agreement) than the letter of credit that is proposed under the PREP. Otherwise, selected independent power producers would be reluctant to sign power purchase agreements. However, these large-scale projects have not yet been completed.

7. **Potential projects.** The PREP team closely monitors several potential projects in the advanced development stage. For instance, there is a current tender for a 25-MW solar power plus battery storage project in Tonga, for which bids were received in January 2023 and are under evaluation. In Samoa, a 67-MW solar plus battery storage project has been awarded to a French engineering firm. In Fiji, two renewable energy projects are under discussion for a 5-MW solar power awarded to Sunergise and a hydropower project in Vanu Levu which has completed a feasibility study.

IV. **CONCLUSION**

8. No project under the PREP has been signed since its approval on 17 April 2019. The financial close for the anchor project in Tonga was not reached because of the high-interest rate environment after the COVID-19 pandemic and technical issues with the plant. Following the pandemic, the process of developing and implementing projects has started again. Further projects described in para. 7 have been brought to the early development stages and will be added to the pipeline for financing when ready.

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10 These potential projects are subject to change depending on bid and due diligence results.
## DESIGN AND MONITORING FRAMEWORK

### Impact the Program is Aligned with

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<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Risks</th>
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<td><strong>Outcome</strong></td>
<td>By 2026</td>
<td>Program progress report</td>
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<td>Private sector investment in renewable energy in the Pacific increased</td>
<td>Five investments in renewable energy generation are supported by the program, and at least two projects of which will be categorized as having some gender elements. (2019 baseline: 0)</td>
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<td>Political support for renewable energy declines</td>
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<td>Commercial financiers unwilling to finance IPPs in Pacific DMCs, despite the program</td>
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### Outputs
Pacific Renewable Energy Program successfully established
By 2024
Loans and guarantees obligations of the program reached $50 million (2019 baseline: 0)
Program progress reports
Insufficient demand for loans and guarantees within target Pacific DMCs

### Key Activities with Milestones

#### Output 1: Pacific Renewable Energy Program successfully established
Guarantee program is operational when financing agreements are signed by 2020.

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DMC = developing member country, IPP = independent power producer.
