

SUMMARY OF PROJECT PERFORMANCE

A. Background

1. The original project was approved on 27 June 2013 and became effective on 9 June 2014.¹ The first additional financing was approved on 20 October 2015 and became effective on 30 November 2015.² The second additional financing was approved on 14 December 2016 and became effective on 28 March 2017.³ The current project⁴ plans to (i) construct and install solar power systems with a total capacity of 1.32 megawatt-peak (MWp) and rehabilitation by TPL of the existing grid network near the solar power generation systems on the islands of 'Eua and Vava'u by replacing cables, poles, distribution transformers, switchgears, and other equipment; (ii) provide operations and maintenance (O&M) training and knowledge transfer to the implementing agencies for at least 5 years after commissioning of the solar systems including development of a program manual for O&M of solar generation and distribution systems; and (iii) assist the IAs to implement the project in an efficient and effective manner by recruiting project management consultants (PMCs) for at least 5 years after commissioning of the solar systems.

2. The executing agency (EA) is the Ministry of Finance and National Planning (MFNP). Tonga Power Limited (TPL) is the implementing agency for both on-grid solar and grid-rehabilitation components. The Ministry of Energy, Information, Disaster Management, Climate Change and Communications (MEIDECC) will be responsible for the implementation of the mini/off-grid component.

B. Performance of the Project

3. The original project has encountered initial implementation delays for a variety of reasons, including damage caused by the most powerful storm ever recorded in Tonga.⁵ Following the devastation caused when Cyclone Ian passed directly over the northeast islands of Ha'apai in January 2014, the Government of Tonga (government) requested a temporary suspension of project activities so that it could focus on emergency assistance needed to reconstruct and strengthen the electricity network and school facilities on the island group.⁶ After ADB approved the Cyclone Ian Recovery Project in May 2014, activities on the original project resumed.

¹ ADB. 2013. *Report and Recommendation of the President to the Board of Directors: Proposed Grant and Administration of Grant to the Kingdom of Tonga for the Outer Island Renewable Energy Project*. Manila.

² ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Grant and Administration of Grant to the Kingdom of Tonga for the Outer Island Renewable Energy Project (Additional Financing)*. Manila. It is to rehabilitate 80% and 20% of existing grid networks on 'Eua and Vava'u. ADB and the Second Danish Cooperation Fund for Renewable Energy and Energy Efficiency for Rural Areas provides \$2.19 million and the European Union provides €3.00 million, all on a grant basis. Tonga Power Limited will provide \$0.67 million as an in-kind contribution.

³ ADB. 2016. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Grant for Additional Financing to the Kingdom of Tonga for the Outer Island Renewable Energy Project*. Manila. ADB provided a loan of \$2.5 million equivalent and a grant of \$2.5 million from ADB's Special Funds resources as well as an additional contribution from TPL of \$0.60 million. It is to rehabilitate the remaining 20% and additional 30% of existing grid networks on 'Eua and Vava'u.

⁴ It includes the original project and the two additional financings.

⁵ Cyclone Ian was a category 5 system, with winds of more than 200 kilometers per hour and gusts of about 300 kilometers per hour. About 5,000 people were directly affected—66% of Ha'apai's population. According to TPL, the cyclone damaged 90% of the Ha'apai power network's distribution lines, 40% of the high-voltage poles, 70% of the low-voltage poles, 65% of the transformers, 90% of the transformer structures, one of the two generators, and 95% of the streetlights.

⁶ ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Grant and Administration of Grant to the Kingdom of Tonga for the Cyclone Ian Recovery Project*. Manila. Overall progress of rehabilitating the electricity network on Ha'apai has been satisfactory.

4. Despite the delays, the progress made on project implementation since effectiveness has been satisfactory overall. Other than identified cost overruns and financing gaps, the current project faces no major risks to a successful delivery of its expected outputs or to keeping to its revised implementation schedule. Since Q4 2017, the current project has been a not well-performing project due to the following exogenous reasons:⁷

- The government formally requested to postpone the approval of the proposed additional financing until 2018 because the latest debt sustainability analysis in 2017 determined that Tonga had a high risk of debt distress and in 2018, is eligible for 100% grant from the Asian Development Fund;⁸
- In August 2017, the King of Tonga dissolved the Legislative Assembly of Tonga (government) of Prime Minister (PM). Therefore, general elections were held in Tonga on 16 November 2017. The election resulted in a re-election of the former PM, with 'Akilisi Pōhiva remaining as the PM. Due to the dissolution of government by the King, the government assumed a caretaker role until the beginning of 2018; and
- Tropical Cyclone Gita landfall in the Kingdom of Tonga on 12-13 February 2018 caused widespread damage across the islands of Tongatapu and 'Eua. The total economic value of the effects caused by Cyclone Gita was at T\$356.6 million (\$164.3 million equivalents). This is equivalent to 37.9% of the nominal gross domestic product (GDP) in Tonga⁹ and suggests the scale of impact. Of these effects, T\$209.1 million (\$96.3 million equivalents) is attributable to damage and T\$147.5 (\$68.0 million equivalents) is attributable to losses.¹⁰

5. The performance of the current project has been assessed in the following aspects:

(i) **Delivery of expected outputs.**

- Output 1 is constructing and installing on-grid, mini-grid and off-grid solar power systems with a total capacity of 1.32 MWp on nine outer islands of Tonga. All components of this output are expected to be procured through two separate turnkey packages: one for the grid-connected solar photovoltaic plants (on-grid package) and one for both mini and off grid solar system. The on-grid package was awarded in February 2016 and was completed in May 2017. For the mini and off grids solar package, the tender documents were advertised 11 January 2017 and the bid opening was held on 21 March 2017. However, the bid price from the lowest substantially responsive bidder is about 31% greater than the original estimate.¹¹ This contract was signed in April 2018 under advance contracting. Output 1 also includes rehabilitation of existing grid network on 'Eua and Vava'u, which rehabilitate 100% and 50% of existing grid networks on 'Eua and Vava'u. The rehabilitation work on 'Eua was completed in 2017. The remaining rehabilitation works on Vava'u is expected to be delivered as anticipated. After the proposed third additional financing is approved and becomes effective, the mini and off grids solar package is expected to be delivered as anticipated.
- Output 2 comprises training to IAs on O&M and the O&M program manual of solar generation and distribution systems for up to 5 years after plant commissioning. This output is not yet due.

⁷ ADB. 2011. Additional Financing. *Operations Manual*. OM H5/OP. Manila. The current project is not performing well, However, the proposed additional financing will follow the business process set out in the RRP of the Facility.

⁸ The memo of 2710 Debt Distress Classifications for Concessional Assistance-only Countries was approved on 23 February 2018.

⁹ The share is calculated for the nominal 2017 GDP, which is estimated at T\$941.9 million.

¹⁰ Government of Tonga. 2018. Tonga Post-Disaster Rapid Assessment Tropical Cyclone Gita. Nuku'alofa.

¹¹ The bid price from the recommended bidder is \$ 3,685,390 equivalents.

- Output 3 is efficient project management is provided. To this end, capacity of the project management unit (PMU) has been enhancing through the provision of project management services by the PMC.¹² The PMU manager consultant was additionally recruited in March 2016. Since then, the PMU has been officially established and the PMU manager will assist EA and IAs in coordinating the overall project implementation and monitoring activities.
- (ii) **Satisfactory implementation progress.** Except the delay caused by the above mentioned exogenous reasons, progress in respect to contract awards and disbursement are satisfactory. As of March 2018, (i) cumulative contract awards for the current project is at \$12.7 million, or 73.0% of financing administered by ADB; and (ii) cumulative disbursements for the current project has reached \$7.3 million, or 43% of financing administered by ADB.
- (iii) **Satisfactory compliance with safeguard policy requirements.** The current project has also conducted all necessary safeguards due diligence and is noted to be in compliance with the ADB's Safeguard Policy Statement (2009). No significant issue has arisen during project implementation to date.
- (iv) **Successful management of risks.** The current project has managed or mitigated the risks identified during processing and implementation to date. Other than identified cost overruns and financing gaps, the current project currently faces no major risks to a successful delivery of its expected outputs or to keeping to its revised implementation schedule. Moreover, TPL has confirmed that they will undertake the maintenance of both outer island mini grid component and solar home system component as approved by the Hon. Cabinet Ministers on 16 December 2015, which will enhance the accountability of the O&M service for mini and off-grid components. TPL will also assist the PMU in developing the bidding documents for the mini-grid installation and rehabilitation package.
- (v) **On track rating.** Since fourth quarter of 2017, the current project was classified as *potential problem* under ADB's project performance rating system (PPR) mainly due to the exogenous reasons explained in paragraph 4. Given these exogenous reasons, (i) the signing of the solar generation turnkey package was delayed due to the postponement of the proposed additional financing and the dissolution of government by the King; (ii) rehabilitation works on Vava'u has been delayed due to Cyclone Gita. Therefore, both contract awards and disbursement have been under-achieved compared to projections in the project performance rating system (PPR), which is the main reason that the current project is not performing well. Both current 'potential problem' rating in the PPR and '*Not Performing Well*' status will be immediately corrected once the proposed additional financing is approved and becomes effective.

C. Conclusion

6. The current project will not meet its development objectives without the proposed additional financing. Other than identified cost overruns and financing gaps, the current project currently faces no major risks to a successful delivery of its expected outputs or to keeping to its

¹² On 25 March 2014, TPL entered into contract with the Consultant, Sustainable Technology Resources PTE LTD, with a value of US\$750,000.

revised implementation schedule. The overall project¹³ would be completed within three years of the current closing date of the original project. Therefore, scaling down, full cancellation, or restructuring the project would not be a feasible option. Once the proposed additional financing is approved and becomes effective, the project's poor performance can be improved. The overall project including the proposed third additional financing remains technically and economically viable. The proposed third additional financing component enhances the design of the original project so that it effectively supports the development of the solar photovoltaic plants – one of the government's key priorities. It is concluded that the proposed additional financing component will enhance the outcome and impact of the current project, as well as ADB's contribution to power sector development in Tonga.

¹³ The overall project includes the current project and the proposed additional financing.