

Project Administration Manual

Project Number: 49450-009
Grant Number: 0664
March 2020

Nauru: Solar Power Development Project

ABBREVIATIONS

ADB	–	Asian Development Bank
ANS	–	assessment of national systems
BESS	–	battery energy storage system
CEMP	–	construction environmental management plan
CEO	–	Chief Executive Officer
CIE	–	commerce, industry, and environment
CSPRA	–	Country and Sector Procurement Risk Assessment
DCIE	–	Department of Commerce, Investment and Environment
DFAT	–	Department of Foreign Affairs
DOF	–	Department of Finance and Sustainable Development
DMC	–	developing member countries
DMF	–	design and monitoring framework
EA	–	executing agency
EMP	–	environmental management plan
ESMS	–	environmental and social management system
EU	–	European Union
FMA	–	financial management assessment
GoA	–	Government of Australia
GoN	–	Government of Nauru
IA	–	implementing agency
ICB	–	international competitive bidding
IEE	–	initial environmental examination
IPA	–	interim procurement agent
IPP	–	Independent Power Producer
MFAT	–	Ministry of Foreign Affairs and Trade
NUC	–	Nauru Utilities Corporation
NRC	–	Nauru Rehabilitation Centre
O&M	–	operations and maintenance
OSFMD	–	Operations Services and Financial Management Department
PAD	–	Planning and Aid Division
PAM	–	project administration manual
PIC	–	Project Implementation Consultants
PPA	–	Power Purchase Agreement
PPC	–	plant procurement contract
PPP	–	public-private partnership
PPTA	–	project preparatory technical assistance
PSC	–	Project Steering Committee
PV	–	photovoltaic
QCBS	–	quality- and cost-based selection
RONPHOS	–	Republic of Nauru Phosphate Corporation
RPC	–	Regional Processing Center
RRP	–	report and recommendations of the President
SCADA	–	supervisory control and data acquisition
SEMP	–	site environment management plan
SOE	–	state-owned enterprise
SPS	–	Safeguards Policy Statement
TA	–	technical assistance
WA	–	withdrawal application

WEIGHTS AND MEASURES

MW	–	megawatt
MWh	–	megawatt per hour

CONTENTS

I.	PROJECT DESCRIPTION	1
II.	IMPLEMENTATION PLANS	2
	A. Project Readiness Activities	2
	B. Overall Project Implementation Plan	3
	C. Project Implementation Organizations: Roles and Responsibilities	4
	D. Key Persons Involved in Implementation	5
	E. Project Organization Structure	6
III.	COSTS AND FINANCING	4
	A. Cost Estimates Preparation and Revisions	4
	B. Key Assumptions	4
	C. Investment and Financing Plans	4
	D. Detailed Cost Estimates by Expenditure Category	6
	E. Allocation and Withdrawal of Grant Proceeds	7
	F. Detailed Cost Estimates by Financier	8
	G. Detailed Cost Estimates by Outputs	9
	H. Detailed Cost Estimates by Year	10
	I. Contract and Disbursement S-Curve	11
	J. Fund Flow Diagram	12
IV.	FINANCIAL MANAGEMENT	13
	A. Financial Management Assessment	13
	B. Summary of Financial Management Assessment of NUC	13
V.	PROCUREMENT AND CONSULTING SERVICES	16
	A. Procurement of Goods, Works, and Consulting Services	16
	B. Implementation Arrangements	21
	C. Procurement Plan	21
	D. Consultant's Terms of Reference	25
VI.	SAFEGUARDS	30
VIII.	GENDER AND SOCIAL DIMENSIONS	31
IX.	PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION	35
	A. Monitoring	37
	B. Evaluation	38
	C. Reporting	38
	D. Stakeholder Communication Strategy	38
X.	ANTICORRUPTION POLICY	40
XI.	ACCOUNTABILITY MECHANISM	41
XII.	RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL	42

Tables

Table 1: Project Readiness	2
Table 2: Project Implementation Plan.....	3
Table 3: Project Implementation Arrangements.....	4
Table 4: Escalation Rates for Price Contingency Calculation	4
Table 5: Project Investment Plan.....	8
Table 6: Financing Plan	8
Table 7: Detailed Cost Estimates by Expenditure Category.....	9
Table 8: Withdrawal of Grant Proceeds.....	7
Table 9: Summary of Financial Management Assessment of NUC	11
Table 10: Financial Management Internal Control and Risk	12
Table 11: Financial Management Action Plan	13
Table 12: Project procurement questions and answers	18

Figures

Figure 1: Project Structure	7
Figure 2: Risk Matrix	18

Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Department of Finance and Sustainable Development (DOF) and the Nauru Utilities Corporation (NUC) are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the recipient and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by DOF and NUC of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At grant negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the grant agreement. Such agreement shall be reflected in the minutes of the grant negotiations. In the event of any discrepancy or contradiction between the PAM and the grant agreement, the provisions of the grant agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.

I. PROJECT DESCRIPTION

1. The project will finance a 6.0-megawatt (MW) grid connected solar power plant (measured as AC output) and 2.5 MWh/5.0 MW battery energy storage system (BESS) for solar smoothing energy storage (SSES). The system will be fully integrated and automated with the existing diesel generation (17.9 MW installed capacity currently manually operated) to optimize solar energy use, to enable optimal BESS charging/discharging and to provide optimal shut-off of the diesel engines. This will reduce Nauru's over reliance on diesel for power generation. The project will also support the institutional strengthening of the Nauru Utilities Corporation (NUC), the state-owned power and water utility, with a focus on women in leadership and technical positions. Project preparatory technical assistance was used in project preparation.¹
2. The project impact is a reliable, affordable, secure, and sustainable energy supply to meet the socio-economic development needs of Nauru. The outcome of the project will be that NUC will supply reliable and cleaner electricity. Once this project – 6.0 MW solar photovoltaic (PV) and BESS – and the New Zealand Ministry of Foreign Affairs and Trade (MFAT) project – 1.0 MW solar PV – are completed, the solar power generation will have increased from 1,180.0 MWh/year to 15,500.0 MWh/year and will represent 47% of the electricity generation mix on the island. NUC has now approached MFAT to fund an assessment of pumped hydroelectric energy storage to allow load shifting and enable up to 90% renewable energy penetration.
3. **Solar power plant installed.** The project will finance the installation of a 6.0 MW ground mounted solar PV system, an 11.0 kV substation including feeders for the solar farm, for the BESS, for the diesel generators (to be relocated by NUC) and transmission linkages, the balance of system, a monitoring and control system integrated with NUC existing system and associated facilities (including boundary fences, office, water storage and reticulation).
4. **Battery energy storage system installed.** The project will finance the installation of a 5.0 MW/2.5 MWh BESS and a master controller system to allow management of intermittency of output from solar generation, storage for load shifting and diesel engines utilization.
5. **Institutional capacity of NUC strengthened.** The project will provide institutional capacity and strengthening support to NUC in the areas of solar plants and battery storage systems, their integration to the grid, financial management, and gender; as well as project implementation assistance. Project related employment will include gender targets. Female NUC employees will be supported to attend training related to the operation of the solar facility and BESS.

¹ The Asian Development Bank provided project preparatory technical assistance for the Solar Power Development Project under the Pacific Renewable Energy Investment Facility (TA 9242-REG).

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Table 1: Project Readiness

Indicative Activities	Month (2019)							(2020)	Responsible Agency
	6	7	8	9	10	11	12	1	
Advance contracting actions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ADB/NUC
ADB Board approval				<input type="checkbox"/>					ADB
Grant signing				<input type="checkbox"/>					ADB/DOF
Government legal opinion								<input type="checkbox"/>	DOF
Grant effectiveness								<input type="checkbox"/>	ADB/DOF

ADB = Asian Development Bank, DOF = Department of Finance and Sustainable Development, NUC = Nauru Utility Corporation.

Source: Asian Development Bank.

B. Overall Project Implementation Plan

6. The project will be implemented over a period of 3 years. The project is expected to be completed by 31 August 2023, and the grant is expected to be closed by 28 February 2024. The project implementation schedule is provided in **Table 2**.

Table 2: Project Implementation Plan

Activity	Q2 19			Q3 19			Q4 19			Q1 20			Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	Q1 24
	A	M	J	J	A	S	O	N	D	J	F	M																
ADVANCE PROCUREMENT ACTIVITIES																												
NUC Activities																												
Develop SEMP																												
Site Clearing																												
Project Implementation Consultant (PIC)																												
TOR for EOI																												
Review by NUC																												
Advertise EOI																												
Shortlisting																												
RFP																												
Evaluation																												
Contract negotiations																												
Award Contract and mobilisation																												
Plant Procurement Consultant (PPC)																												
Prepare bid documents																												
NUC Review																												
Submit final draft of bid documents																												
Bidding period																												
Bid evaluation																												
Approval Bid Evaluation Report GoN																												
Approval Bid Evaluation Report ADB																												
Contract Negotiations and award and effectivity																												
Contract Effectiveness																												
Implementation																												
PPC: Execution of works																												
PIC: Supervision and Capacity Building)																												
Defects Liability Period																												
Guarantee Tests																												

EOI = expression of interest; DMF = design and monitoring framework; NUC = Nauru Utilities Corporation; PIC = project implementation consultant; PPC = plant, procurement contract; SEMP = site environmental management plan; RFP = request for proposal; TOR = terms of reference.

Source: Asian Development Bank.

C. Project Implementation Organizations: Roles and Responsibilities

Table 3: Project Implementation Arrangements

Project Implementation Organizations	Management Roles and Responsibilities
<p>Executing agency</p> <p>Department of Finance and Sustainable Development Project specific management body: Planning and Aid Division</p>	<ul style="list-style-type: none"> • Oversee implementation of the grant • Chair and coordinate the steering committee meetings • Submission of withdrawal applications
<p>Project Steering Committee</p> <p>The project steering committee will be chaired by Deputy Secretary of PAD and will have the following members:</p> <ul style="list-style-type: none"> - Advisor for DOF - Chief Executive Officer, NUC - Secretary, Department of Commerce, Industry and Environment (CIE) - Director, Environment Division, CIE - Director, Energy Division, CIE - Director, Climate Change Division, CIE - Infrastructure Sector Planner, PAD - Representatives, Nauru Community-based Organization - ADB (observer) 	<ul style="list-style-type: none"> • Oversee project implementation • Monitor project progress • Resolve any obstacles or impediments to implementation • Guide the executing agency • Meet at least once each quarter, or as the project requires
<p>Implementing Agency</p> <p>Nauru Utilities Corporation</p>	<ul style="list-style-type: none"> • Coordinate with ADB for all project management activities including project review missions • Provide staff and resources required to implement the project • Lead, manage and monitor project and GAP implementation activities, ensuring compliance with the government and ADB's requirements • Attend and support the project steering committee meetings as necessary • Facilitate the coordination with government agencies needed to implement the project • Monitor and evaluate project activities and outputs, complete monthly progress reports (featuring sex-disaggregated data) submitted to the project steering committee and then endorse to the EA/ADB • Provide government counterpart assistance to technical assistance consultants

Project Implementation Organizations	Management Roles and Responsibilities
	<ul style="list-style-type: none"> • Ensure all contract administration matters are elevated for approval to the NUC Board and Cabinet/Minister • Prepare and submit the semiannual safeguards and GAP monitoring reports to the project steering committee, EA and ADB, including sex-disaggregated data • Review and verify documents submitted by project implementation consultants and the plant procurement contractor • Review invoices and prepare payment certificates recommending payments to the contractors • Coordinate with the plant procurement contractor and project implementation consultant • Facilitate and conduct communication with the local stakeholders • Consult with the public and landowners, and disclose project information • Establish and maintain the project accounts • Coordinate with the external auditor for the annual audit of the project accounts • Prepare withdrawal applications
ADB	<ul style="list-style-type: none"> • Facilitate implementation and review the progress on a regular basis • Conduct regular grant review missions • Procure project implementation consultants • Review draft bidding documents in accordance with the Procurement Plan • Overall coordination and advisory support • Assist NUC prepare and undertake the site environmental management plan

ADB = Asian Development Bank; BESS = battery energy storage system; DOF = Department of Finance and Sustainable Development; MCIE = Ministry of Commerce, Industry and Environment; EA = executing agency; NUC = Nauru Utilities Corporation; PAD = Planning and Aid Division.

Source: Asian Development Bank.

D. Key Persons Involved in Implementation

Executing Agency

Department of Finance and Sustainable Development

Novena Itsimaera
Acting Secretary
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Implementing Agencies

Nauru Utilities Corporation

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Mission Leader

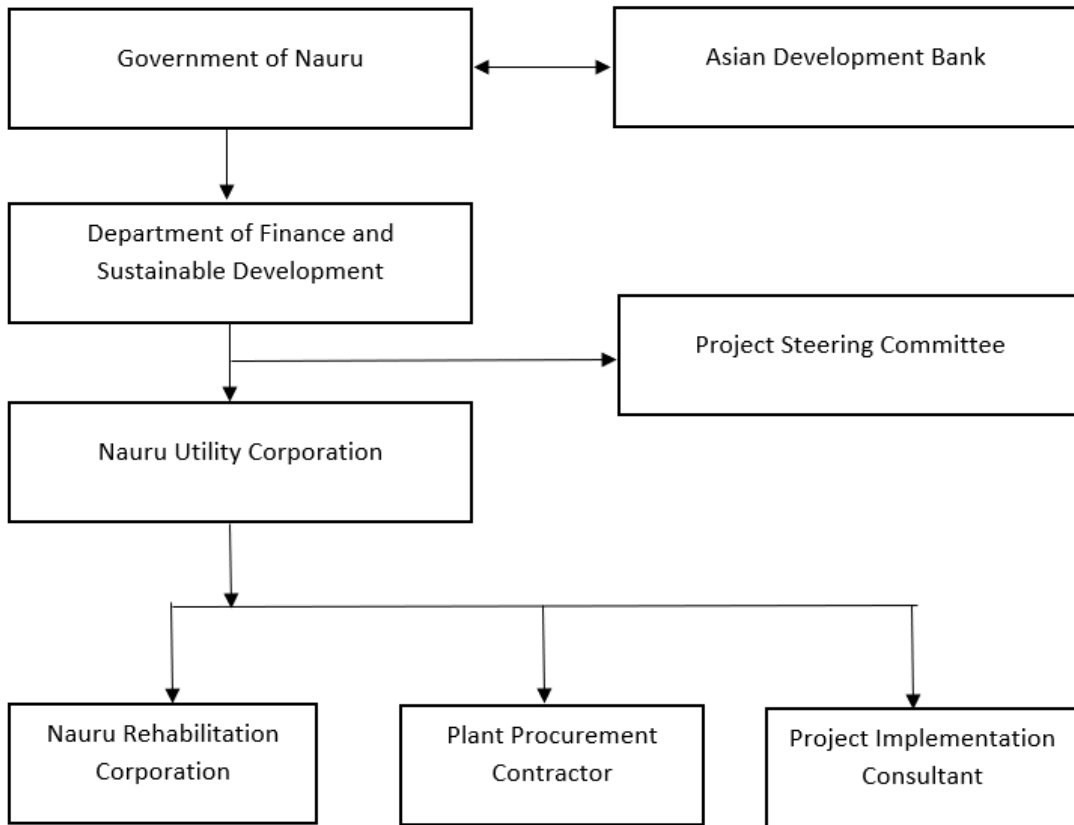
Rafayil Abbasov
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Telephone: +632 8632 4444 local 6109 local 5861
E-mail address: rabbasov@adb.org

E. Project Organization Structure

7. The Government of Nauru will be the grant recipient. The executing agency will be the Department of Finance and Sustainable Development (DOF), and the implementing agency will be the Nauru Utilities Corporation (NUC). A Renewable Energy Unit has already been established within NUC, which will act as the project management unit for the project.

8. A consulting firm will be engaged as the project implementation consultant (PIC) to support the Renewable Energy Unit of NUC in supervising and monitoring the outputs of the Plant Procurement Contractor (PPC) and delivering institutional capacity building activities. An individual consultant will be recruited to conduct the legal reform activities of the project. A project steering committee will oversee implementation, monitor progress, and provide guidance to the executing agency. PAD will chair and host the project steering committee and will act as the secretariat. The overall project structure is shown in Figure 1.

Figure 1: Project Structure



III. COSTS AND FINANCING

9. This section describes the project costs, categories, and components to be financed by ADB and the Government of Nauru (GoN). Grant proceeds will be disbursed per the *Loan Disbursement Handbook* (2017, as amended from time to time), and subject to the provisions of the grant and project agreements.

A. Cost Estimates Preparation and Revisions

10. The cost estimates were prepared under project preparatory technical assistance and based on concept designs. The cost estimates have been reviewed by the government.

B. Key Assumptions

11. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: A\$0.7076 = \$1.00 (as of 3 April 2019)
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 4: Escalation Rates for Price Contingency Calculation

Item	2019	2020	2021	2022	2023
Foreign rate of price inflation	1.5%	1.5%	1.6%	1.6%	1.6%
Domestic rate of price inflation	2.5%	2.0%	2.0%	2.2%	2.3%

Source: ADB estimates.

C. Investment and Financing Plans

12. The project investment is estimated at US\$26.98 million. Detailed cost estimates by expenditure category is in Table 7 and by financier in Table 9. The major expenditure items are solar, power plant, BESS, control system for BESS and PV (SCADA), substation, civil works and capacity building.

Table 5: Project Investment Plan
(in \$ million)

Component	Amount ^a
A. Base Cost^b	
Output 1: Ground mounted solar installed	14.17
Output 2: Battery energy storage system installed	3.29
Output 3: Institutional capacity strengthened	1.70
Subtotal (A)	19.15
B. Site Preparation and Other Costs ^c	3.84
C. Taxes and Duties	1.11
D. Project Audits	0.03
Total Base Cost	24.14
E. Contingencies ^d	2.85
Total (A+B+C+D+E)	26.98

- ^a Includes taxes and duties of \$1.11 million.
- ^b Prices as of 3 April 2019.
- ^c Nauru Utilities Corporation will pay for: (i) land lease and rental payments to landowners; (ii) site preparation, and (iii) other project management costs.
- ^d Physical contingencies computed at 10% for plant procurement contract and consulting services and capacity building. Price contingencies computed at an average of 1.5% on foreign currency costs and 2.1% on local currency costs includes provision for potential foreign exchange fluctuation under the assumption of a purchasing power parity exchange rate.

Notes: Figures may not tally due to rounding.

Source: Asian Development Bank estimates.

13. ADB will finance the expenditures in relation to civil works, electrical and mechanical works, battery energy storage system (BESS) and transformers, control system (SCADA) for BESS and PV, consulting services, gender activities, and physical and price contingencies. The government will finance taxes and duties through exemptions, site preparation, and project audits.

14. The summary financing plan is in Table 6.

Table 6: Financing Plan
(in \$ million)

Source	Total	%
Asian Development Bank	22.00	82%
Government of Nauru	4.98	18%
Total	26.98	100%

Source: Asian Development Bank estimates.

D. Detailed Cost Estimates by Expenditure Category

Table 7: Detailed Cost Estimates by Expenditure Category

Item	In A\$ Million			In \$ Million		Total Cost	% of Base Cost
	Foreign Exchange	Local Currency	Total	Foreign Exchange	Local Currency		
A. Base Cost ^a							
Plant Procurement Contract	24.66	-	24.66	17.45	-	17.45	0.72
Consulting Services and Capacity Building	2.40	-	2.40	1.70	-	1.70	0.07
Sub-total (A)	27.06	-	27.06	19.15	-	19.15	0.79
B. Site Preparation and Other Costs ^b	-	5.43	5.43	-	3.84	3.84	0.16
C. Taxes and Duties ^c	-	1.57	1.57	-	1.11	1.11	0.05
D. Project Audits	-	0.04	0.04	-	0.03	0.03	0.00
Total Base Cost (A+B+C+D)	27.06	7.04	34.10	-	4.98	24.14	1.00
E. Contingencies ^d							
Physical	2.71	-	2.71	1.92	-	1.92	0.08
Price	1.32	-	1.32	0.93	-	0.93	0.04
Sub-total (E)	4.02	-	4.02	2.85	-	2.85	0.12
Total Project Cost (A+B+C+D+E)	31.09	7.04	38.13	2.85	4.98	26.98	1.12

^a Prices as of 3 April 2019.

^b Nauru Utilities Corporation will pay for (i) land lease and rental payments to landowners, (ii) site preparation, and (iii) other project management costs.

^c The government will bear taxes and duties of \$1.11 million (non-cash contribution) through exemption.

^d Physical contingencies computed at 10% of base cost for site preparation, plant procurement contract and consulting services. Price contingencies computed at an average of 1.5% on foreign currency costs and 2.1% on local currency costs includes provision for potential foreign exchange fluctuation under the assumption of a purchasing power parity exchange rate.

Notes: Figures may not tally due to rounding.

Source: Asian Development Bank estimates.

E. Allocation and Withdrawal of Grant Proceeds

Table 8: Allocation and Withdrawal of Grant Proceeds

Allocation and Withdrawal of Grant Proceeds			
Category			ADB Financing
	Item	Total Amount Allocated for ADB Financing (\$)	Percentage and Basis for Withdrawal from the Grant Account
		Category	
1	Plant Procurement Contract, Consulting Services and Capacity Building	22,000,000	100% of total expenditure claimed*
	Total	22,000,000	

* Exclusive of taxes and duties imposed within the territory of the Recipient.

F. Detailed Cost Estimates by Financier

Table 9: Detailed Cost Estimates by Financier

Item	Total	Asian Development Bank	% of Cost Category	Government of Nauru	% of Cost Category
A. Base Cost					
Plant Procurement Contract	17.45	17.45	100%	-	
Consulting Services and Capacity Building	1.70	1.70	100%	-	
Sub-Total (A)	19.15	19.15	100%	-	
B Site Preparation and Other Costs ^b	3.84	-		3.84	100%
C. Taxes and Duties ^c	1.11	-		1.11	100%
D. Project Audits	0.03	-		0.03	100%
Total Base Cost (A+B+C+D)	24.14	19.15	79%	4.98	21%
E. Contingencies^d					
Physical	1.92	1.92	100%	-	
Price	0.93	0.93	100%	-	
Sub-Total (E)	2.85	2.85	100%	-	
Total Project Cost (A+B+C+D+E)	26.98	22.00	82%	4.98	18%

Note: Figures may not tally due to rounding.

Source: Asian Development Bank estimates.

^a Prices as of 3 April 2019.

^b Nauru Utilities Corporation will pay for (i) land lease and rental payments to landowners, (ii) site preparation, and (iii) other project management costs.

^c The government will bear taxes and duties of \$1.11 million (non-cash contribution) through exemption.

^d Physical contingencies computed at 10% of base cost for site preparation, plant procurement contract and consulting services. Price contingencies computed at an average of 1.5% on foreign currency costs and 2.1% on local currency costs includes provision for potential foreign exchange fluctuation under the assumption of a purchasing power parity exchange rate.

Notes: Figures may not tally due to rounding.

Source: Asian Development Bank estimates.

G. Detailed Cost Estimates by Outputs

Table 10: Detailed Cost Estimates by Outputs

Item	Solar Power Plant Installed	Battery Energy Storage System Installed	Institutional Capacity Strengthened	Total
A. Base Cost				
Plant Procurement Contract	14.17	3.29	0.00	17.45
Consulting Services and Capacity Building	0.00	0.00	1.70	1.70
Sub-Total (A)	14.17	3.29	1.70	19.15
B. Site Preparation and Other Costs	3.84	0.00	0.00	3.84
C. Taxes and Duties	0.91	0.13	0.07	1.11
D. Project Audits	0.01	0.01	0.01	0.03
Total Base Cost (A+B+C+D)	18.93	3.43	1.78	24.13
E. Contingencies				
Physical	1.42	0.33	0.17	1.92
Price	0.69	0.16	0.08	0.93
Sub-Total (E)	2.11	0.49	0.25	2.85
Total Project Cost (A+B+C+D+E)	21.03	3.91	2.03	26.98

Note: Figures may not tally due to rounding.
Source: Asian Development Bank estimates.

H. Detailed Cost Estimates by Year**Table 11: Detailed Cost Estimates by Year**

	Total	Year 1	Year 2	Year 3	Year 4
A. Base Cost					
Plant Procurement Contract	17.45	0.87	3.49	8.73	4.36
Consulting Services and Capacity Building	1.70	0.09	0.34	0.85	0.43
Sub-total (A)	19.15	0.96	3.83	9.58	4.79
B. Site Preparation and Other Costs	3.84	3.84	0.00	0.00	0.00
C. Taxes and Duties	1.11	0.28	0.28	0.28	0.28
D. Project Audits	0.03	0.01	0.01	0.01	0.01
Total Base Cost (A+B+C+D)	24.14	5.09	4.12	9.86	5.07
E. Contingencies					
Physical	1.92	0.00	0.00	0.00	1.92
Price	0.93	-	0.00	0.00	0.93
Sub-total (E)	2.85	0.00	0.00	0.00	2.85
Total Project Cost (A+B+C+D+E)	26.98	5.09	4.12	9.86	7.92

Note: Figures may not tally due to rounding.
Source: Asian Development Bank estimates.

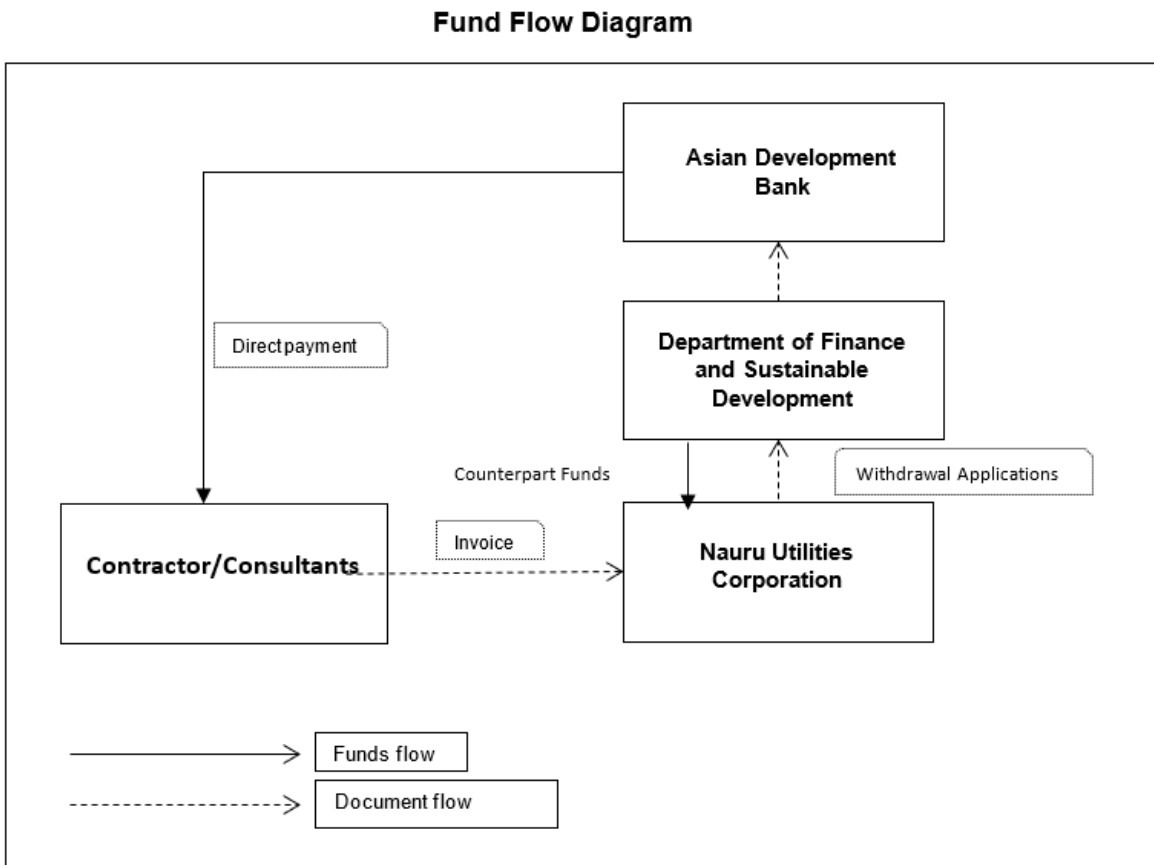
I. Contract and Disbursement S-Curve

15. S-curve shows quarterly contract awards and disbursement projections over the life of the project. The S-curve is only for ADB financing, which will be recorded in ADB’s systems and reported through e-Ops. Counterpart funds and any other co-financing are excluded. The projection for contract awards includes contingencies and unallocated amounts, but excludes front-end fees, service charges, and interest during construction. The total projected disbursements are equal to the full grant amount, up to 4 months after grant closing.

CUMULATIVE	2020/Q3	2020/Q4	2021/Q1	2021/Q2	2021/Q3	2021/Q4	2022/Q1	2022/Q2	2022/Q3	2022/Q4	2023/Q1	2023/Q2	2023/Q3	2023/Q4	2024/Q1	
CA	0	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	17.7	19.7	22
DISB	0	0	1.71	1.71	1.99	13.43	13.71	13.71	13.99	14.705	14.705	15.7	16.7	18.7	22	



J. Fund Flow Diagram



IV. FINANCIAL MANAGEMENT

A. Financial Management Assessment

16. This Financial Management Assessment (FMA) has been prepared in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects¹ and the publication Financial Due Diligence A Methodology Note.² ADB requires that sufficient analysis is undertaken to enable an informed assessment that the borrower's financial management systems are, or will be, sufficiently robust to ensure that funds are used for the purpose intended and that controls will be in place to support project monitoring and supervision. The FMA considers the NUC as the implementing agency for the project. The FMA includes review of the accounting and reporting system, internal and external auditing arrangements, fund disbursement procedures, and information systems. The instrument used for the assessment was ADB's financial management assessment questionnaire. This FMA incorporates the Financial Management Internal Control and Risk Assessment required by the guidelines.

17. The public financial management (PFM) arrangements of Nauru was initially assessed in 2010 using the Public Expenditure Financial Accountability (PEFA) performance measurement Framework.³ The supporting analysis for the PFM is based on the government's PFM performance in the three years (2008 to 2010). This is the first PFM assessment completed for GoN. A PEFA self-assessment was prepared by the DOF in November 2016.

B. Summary of Financial Management Assessment of NUC

18. Key findings of the financial management assessment undertaken for the NUC are as described in Table 12.

Table 12: Summary of Financial Management Assessment of NUC

Particulars	Conclusion
A. Funds Flow Arrangement	NUC was assessed to have adequate financial management capability to administer the proposed project. The simple funds flow arrangement is expected to be managed well by key NUC finance staff with knowledge of ADB processes having previously implemented the ADB-financed NAU: ESSSP.
B. Staffing	The Renewable Energy Unit within NUC will comprise the PMU and will conduct all project relevant activities. PIC will assist the PMU at all times. NUC has financial staff to manage projects according to ADB's financial management procedures having previously administered an ADB-financed project.
C. Accounting Policies and Procedures	The NUC's accounting policy is based on IFRS.
D. Internal and External Audits	The final accounts of NUC is audited by Ernst and Young. NUC's financial statements have consistently been issued an unqualified opinion. There is no internal audit function at NUC but NUC committed to engage another independent external auditor to conduct periodic tests of internal control and processes.

¹ ADB. 2005. *Financial Management and Analysis of Projects*. Manila. Note: Refer to page 14 of Knowledge Management Addendum for more information on the Financial Management Assessment.

² ADB. 2009. *Financial Due Diligence A Methodology Note*. Manila. Note: Refer to page 3 for more information on the Financial Management Assessment.

³ Under the PEFA framework, performance is assessed in relation to seven dimensions of public financial management: credibility of the budget; comprehensiveness and transparency; degree to which the budget is prepared with due regard to government policy; predictability and control in budget execution; accounting, recording and reporting; external scrutiny and audit operations; appropriateness of development partner practices in country; and intergovernmental fiscal relationships.

Particulars	Conclusion
E. Reporting and Monitoring	Financial statements are prepared for the entity in accordance with IFRS.
F. Information systems	The financial management system of NUC is computerized, which suits well with the requirements of the project.

Ernst and Young = international auditing firm, IFRS = International Financial Reporting Standards, NUC = Nauru Utilities Corporation, PIC = project implementation consultant, PMU = project management unit.

19. Actions required to be taken by NUC are as follows:

- (i) NUC shall prepare the terms of reference for the outsourcing of internal audit services;
- (ii) NUC shall prepare and submit budget for the counterpart funds annually; and
- (iii) NUC shall ensure that assets are covered by insurance or other means as agreed to in the Grant Agreement.

20. Table 13 outlines the proposed financial management action plan to be undertaken during the implementation of the proposed project.

Table 13: Financial Management Action Plan

Weakness	Risk	Action Items	Period	Responsibility	Status 15/05/2019
No internal audit function at NUC	H	NUC to outsource internal audit services.	Within 6 months from the grant effectiveness date	NUC	Not started
Deficiencies and misinterpretation of ADB guidelines in disbursement and withdrawal of project funds	L	NUC accounts staff will be trained in ADB's disbursement procedures and preparation of withdrawal application	Within 3 months from the grant effectiveness date	NUC	Not started
Assets not covered by insurance	H	NUC to include insurance costs in the budget annually and make sure that assets are insured or as per Grant Agreement	Within 6 months from the grant effectiveness date	NUC	Not started
Untimely release of counterpart funds for land clearing	S	Budget for land clearing approved and available for disbursement	Within 3 months from the grant effectiveness date	NUC	Started

ADB = Asian Development Bank, NUC = Nauru Utilities Corporation, H = High, S = Substantial, M = Medium, L = Low.

21. The main financial management risks identified are: (i) delayed implementation due to slow or insufficient provision of counterpart funds, and (ii) weak internal control due to the absence of an internal audit function within NUC. The overall pre-mitigation financial management risk-rating is substantial. The identified financial management risks will be closely monitored during project implementation. Mitigating measures include: (i) inclusion of covenant in grant agreement to ensure adequate counterpart funds for site preparation, (ii) securing insurance coverage for assets as per Grant Agreement, (iii) inclusion of a financial management professional in the capacity building package to train financial and related staff, and (iv) strengthen internal controls to improve accountability. The implementing agency has agreed to implement an action plan as key measure to address the deficiencies. Financial management risks and risk-mitigation measures will be reviewed and updated throughout the life of the project.

1. Disbursement

22. The grant proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time),⁴ and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and procedures is available.⁵ Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

23. Direct payment procedures of the grant proceeds will generally be used for payments of the plant procurement contract and consulting services subject to a minimum withdrawal application (WA) amount. The NUC will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents (checking invoices of the PPC and PIC against project progress), and (iv) preparing and sending withdrawal applications, through DOF, for approval of ADB.

24. Before the submission of the first WA, the government should submit to ADB sufficient evidence of the authority of the person(s) who will sign the WAs on behalf of the government, together with the authenticated specimen signatures of each authorized person. The minimum value per WA is stipulated in the *Loan Disbursement Handbook*. Individual payments below such amount should be paid by the implementing agency and subsequently claimed to ADB through reimbursement. The recipient should ensure sufficient category and contract balances before requesting disbursements. Use of ADB's Client Portal for Disbursements (CPD) is encouraged for submission of WAs to ADB.

25. All disbursements under government financing will be carried out in accordance with regulations of the government and ADB.

2. Accounting

26. NUC will be responsible for: (i) preparing disbursement projections, and (ii) requesting budgetary allocations for project management costs. The government will finance local taxes and duties through exemptions and project management costs.

27. NUC will maintain, or cause to be maintained, separate books and records for all expenditures incurred on the project following International Financial Reporting Standards (IFRS). NUC will prepare project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

3. Auditing and Public Disclosure

28. NUC will cause the detailed project financial statements to be audited in accordance with International Standards on Auditing by an independent auditor acceptable to ADB. The project financial statements will be presented following IFRS. The audited project financial statements, together with the auditor's opinion in the English language, will be submitted to ADB within six months from the end of the fiscal year by the implementing agency.

⁴ The handbook is available electronically from the ADB website (<http://www.adb.org/documents/loan-disbursement-handbook>).

⁵ Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning.

29. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the grant were used only for the purpose(s) of the project; and (iii) whether the implementing agency was in compliance with the financial covenants contained in the legal agreements.

30. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal project supervision, and followed up regularly with all concerned, including the external auditor.

31. The implementing agency has been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.⁶ ADB reserves the right to require a change in the auditor for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

32. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Access to Information Policy (2018).⁷ After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.⁸

V. PROCUREMENT AND CONSULTING SERVICES

A. Procurement of Goods, Works, and Consulting Services

1. Procurement Capacity

33. In February 2017, the ADB carried out a Country and Sector Procurement Risk Assessment (CSPRA) of the Republic of Nauru which considered procurement systems at a national level across the energy, public utilities, and transportation sectors. The overall conclusion of the assessment, based on the following findings, was that the procurement risk was high:

- The legal framework does not cover procurement.

⁶ ADB's approach and procedures regarding delayed submission of audited project financial statements:

(i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.

(ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the grant may be suspended if the audit documents are not received within the next 6 months.

(iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the grant.

⁷ADB. 2018. *Access to Information Policy*. Manila. <https://www.adb.org/documents/access-information-policy>.

⁸ This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraph 97(iv) and/or 97(v).

- There is an incomplete Procurement Manual dated July 2013, with no standard procurement documents or standard general terms and conditions of contract, which is not generally used.
- There is a lack of any procurement planning both when procuring against budget appropriation and forecasting future demand.
- The Interim Procurement Agent (IPA), responsible for the procurement of all non-government/donor-funded contracts in excess of AU\$3,000, is inexperienced in strategic procurement and lacks sufficient capacity or experience to resolve the procurement issues in Nauru.
- There are very few resources available within departments to undertake procurement; a situation exacerbated by the lack of any procurement training.
- Most departments do not have dedicated procurement staff. Purchasing is undertaken by non-specialist staff alongside their other duties. Even where there are staff assigned specifically to procurement duties, these are lacking in knowledge of, and experience in, the subject.
- Supply chain management practices are generally poor and there are no systems in place to improve inventory and logistics management practices.

34. These findings supported two procurement assessments commissioned by the Government of Australia (GOA): (i) Assessment of National Systems (ANS) – Republic of Nauru dated August 2016 and updated 30 May 2017; and (ii) an assessment carried out in December 2016 by an International Procurement Specialist hired by the Department of Foreign Affairs and Trade (DFAT) supporting the Government of Nauru (GON) in tendering for an Independent Procurement Agent (IPA) to undertake all public procurement.

35. The ANS assessed the overall fiduciary risk to DFAT of using GON systems, including procurement systems, as being ‘High’ (pre-mitigation) and ‘Moderate’ after application of mitigation measures. Mitigation measures, some of which are in place, include the deployment of four advisers as Deputy Secretaries within four DOF departments including Customs, Revenue and the Planning and Aid Division (PAD). Although these measures have improved financial management of donor funds, the Australian High Commission still has significant concerns about GON procurement practices.

36. A key finding of the International Procurement Specialist hired by DFAT was that GON must finalize and accept Financial Instructions and the Procurement Manual and promulgate both. Until this happens, effective tendering will not happen, and procurement will remain ad hoc.

37. From discussions in August 2018 with NUC, PAD, and other stakeholders, it was apparent that little had changed since the 2017 CSPRA and the assessments commissioned by GOA; the overall procurement risk remained high.

38. The only exceptions in the above assessments were two State-owned Enterprises (SOE) – Republic of Nauru Phosphate Corporation (RONPHOS) and Nauru Utilities Corporation (NUC) – about which the CSPRA concluded: *‘The SOEs generally appear to have capable Supply and Procurement Units. In particular, Nauru Utilities Corporation has a well-functioning procurement unit. They have participated in ADB funded Tenders for Power Generation Units, and regularly invite goods and works bids through TenderLink. To comply with the Government Procurement Manual, these bids are referred to the IPA in Brisbane, but the NUC Team generally manage the procurement. A review of the NUC Procurement Processes, e-procurement portal, bid documents and bid evaluation reports, confirmed their process and capability is very good.’*

39. Discussions with NUC in August 2018 supported the above assessment and confirmed that the corporation has an established procurement unit with considerable experience in procuring goods and minor projects, including the procurement of a new generator financed by ADB. However, a key member of their procurement unit, is overseas on long-term study leave. In addition, NUC has limited experience in the procurement of larger plant procurement and construction works packages.

2. Project Procurement Classification

40. Project procurement classification is a function of the procurement environment in the country and sector/agency procurement systems/operations (as determined through the country and sector/agency procurement risk assessments) and project specific characteristics.

41. Projects are classified, as either ‘Category A’ or ‘Category B’ at concept stage to guide project preparation and due diligence. For higher risk projects in Procurement Category A projects, the active involvement of ADB’s Procurement, Portfolio and Financial Management Department (PPFD) is required throughout project preparation and processing. The first step is to assess the procurement environment risk based on the country and sector/agency risk assessment based on a three-point scale (Low, Medium, and High) as shown in **Figure 2**.

Figure 2: Risk Matrix

Sector \ Country	LOW	MODERATE	SUBSTANTIAL	HIGH
HIGH	MEDIUM RISK		HIGH RISK	
SUBSTANTIAL				
MODERATE	LOW RISK		MEDIUM RISK	
LOW				

42. As noted above the country risk, based on the CSPRA, is High and the agency risk (NUC) is assessed as Moderate. The Procurement Environment Risk is therefore assessed as Medium, i.e., procurement procedures and practices are generally aligned with international best practices.

43. The next step in determining the Project Procurement Classification is to look at specific characteristics of project implementation and the level of procurement effort required. The questions in **Table 14** help do this.

Table 14: Project Procurement Questions & Answers

Characteristic	Assessor’s comments & finding summary
Is the Procurement Environment Risk for this project assessed as “High” based on the country and sector/agency risk assessments?	No – Medium.

Characteristic	Assessor's comments & finding summary
Are multiple (typically more than three) and/or diverse Executing (EAs) and/or Implementing Agencies (IAs) envisaged during project implementation? Do EAs/IAs lack prior experience in ADB project implementation?	No – one Executing Agency, Department of Finance and Sustainable Development; and one Implementing Agency, Nauru Utilities Corporation. No – the EA and both IAs have been involved with ADB projects before.
Are multiple contract packages and/or complex and high value contracts expected (compare to recent donor projects in DMC)?	No – works will now be implemented through a single Plant Procurement Contract (PPC) comprising the solar farm, BESS, substation, and SCADA. Procurement of the PPC will be under the ADB's Standard Bidding Document for Procurement of Plant, Design, Supply & Installation. Technical Assistance (TA) to procure the PPC will be provided by the TRTA consultant's Procurement Specialist with input from technical specialists.
Does the project plan to use innovative contracts (PPP, Performance based, Design & Built, O&M, etc.)?	No – works will now be implemented through a single Plant Procurement Contract (PPC) comprising the solar farm, BESS, substation, and SCADA. Procurement of the PPC will be under the ADB's Standard Bidding Document for Procurement of Plant, Design, Supply & Installation.
Are contracts distributed in more than three geographical locations?	No – just one site.
Are there significant ongoing contractual and/or procurement issues under ADB (or other donor) funded projects? Has misprocurement been declared in the DMC recently?	No, procurement practices have recently improved following government reforms and additional donor support; actions which were necessary due to historic procurement issues on a number of donor-funded projects.
Does the DMC have prolonged procurement lead times, experience implementation delays, or otherwise consistently fail to meet procurement timeframes?	Yes, but as noted above, procurement practices are improving following government reforms and additional donor support.
Do EAs/IAs lack capacity to manage new and ongoing procurement? Have EAs/IAs requested ADB for procurement support under previous projects?	No, NUC has a well-functioning procurement unit and have recently participated in ADB-funded tender for Power Generation Units. However, NUC has limited experience in the procurement of larger plant procurement and construction works packages and so additional support will be required.

**OVERALL PROJECT CATEGORIZATION
RECOMMENDED**

B

44. Additional support is required for both the EA and IA, but this will come from the TRTA consultant Procurement Specialist with input from technical specialists and the Project Implementation Consultant (PIC). No additional support will be required from PPF.

3. Project Procurement Risk Assessment

45. Building on the discussions in August 2018 with CEO of NUC, and NUC Logistics and Supply Chain Manager, a Project Procurement Risk Assessment of NUC was carried out in October 2018 in accordance with ADB Guidelines for Assessing Country, Sector and Project Procurement Risks. This consisted of a detailed discussion with General Manager Operations, NUC, based on the Project Procurement Risk Assessment Questionnaire. The completed questionnaire was circulated to the other members of NUC's Procurement Department, including Team Leader, Procurement. Additional documentation was provided by NUC, including a procurement process map, training plan and examples of bidding documents and contracts.

46. **Organization and Staff Capacity.** NUC's Procurement Department comprises a total of five full time staff responsible for undertaking all NUC procurement related activities. All staff have a high level of proficiency of English (verbal and written) and are qualified to undertake the procurement required under the proposed project. The project's PMU will draw on in-house technical and procurement expertise and additional technical and procurement support will be provided by the TRTA consultant. Procurement processes and documentation for this project will follow ADB Guidelines. The Bid Documents for the PPC, including solar farm, BESS, substation, and SCADA, will be based on ADB's Standard Bidding Documents (SBD) for Procurement of Plant, Design, Supply and Installation and will be prepared by the TRTA Consultant.

47. **Information Management.** All NUC procurement, other than that related to foreign assistance, is carried out through the TenderLink portal (<https://www.tenderlink.com/nuc/>) with additional records kept by the Procurement Department for a minimum of five years under their documentation retention policy. The use of TenderLink is considered efficient and significantly reduces procurement risks. As such, it will be used by PMU to issue the project's PPC bid documents and respond to clarifications by bidders. It will not be used to receive bid submissions.

48. **Procurement Practices.** NUC's Procurement Department has recently undertaken the procurement of goods, works and consulting services related to foreign assistance including (i) the ADB-funded Electricity Supply Security and Sustainability Project in 2016, for two diesel generators and 11.0 kV switchgear plus the design and supervision consultant; (ii) an ongoing European Union-funded transmission line contract; and (iii) a New Zealand MFAT-funded solar PV facility. Transparency and accountability were ensured through these procurements by following the relevant donor procurement processes and practices.

49. **Effectiveness.** NUC operates a contract management system to monitor and report on performance, payments, and complaints. This is independent of GoN systems.

50. **Accountability Measures.** All NUC personnel are required to comply with, and commit to, NUC's ethical values. Any person involved in procurement is required to declare any conflict of interest and remove themselves from the procurement process. If bid documents for GoN-funded projects are prepared internally, they are reviewed by NUC's management team/CEO before going to the Cabinet for approval. Bids are assessed by an Evaluation Committee set up for each procurement, drawn from personnel with the required expertise, including members of the Procurement Department. The Evaluation Report is reviewed by NUC's management team/CEO before going to the NUC Board for approval. It is then submitted to GoN Cabinet for their endorsement. The procurement process is transparent and auditable with procurement decisions attributable to individuals and committees.

51. Although NUC's Procurement Department have the numbers and experience required to carry out the procurement of goods, works and services for this project, they have only been

involved in one recent ADB procurement, the Electricity Supply Security and Sustainability Project in 2016. NUC's previous Logistics and Supply Chain Manager who played a key role in this procurement, is currently on long-term study leave and TRTA support is therefore required.

52. To address these capacity constraints, the TRTA consultant's international procurement specialist, with additional support from technical specialists, will (i) manage the preparation of the bidding documents for the PPC based on the appropriate ADB SBD (ICB Plant Procurement Method, and the 1 Stage 2 Envelope Bidding Procedure); (ii) support NUC during the procurement process including facilitating pre-bid meetings and site visits and responding to requests for clarification; and (iii) facilitate the evaluation of bids. With these mitigation measure in place, including the additional technical support, the Project Procurement Risk is assessed as Low.

B. Implementation Arrangements

53. The executing agency will be the Department of Finance and Sustainable Development. The implementing agency for the solar component of project will be the Nauru Utilities Corporation (NUC). NUC will establish a project management unit within their existing organisational structure to implement the project. Procurement of goods and works for the Plant Procurement Contract (PPC) will follow ADB's Procurement Guidelines (2015, as amended from time to time) and will be based on ADB SBD (ICB Plant Procurement Method, and the Stage 1 Envelope Bidding Procedure) for the Procurement of Plant, Design, Supply and Installation. The contract will include final design and engineering, supply and installation of equipment, construction works and commissioning, and an O&M knowledge transfer program.

54. All consultants will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). Consulting services will be recruited through firms using the quality- and cost-based selection method (QCBS) with a quality to cost ratio of 90:10. Consulting services will include a Project Implementation Consultant (PIC) to review designs prepared by the contractor and provide supervision services/advice to NUC during the PPC.

55. Advance contracting and retroactive financing will apply for the procurement of civil works and consultancy contracts. The amount to be retroactively financed will not exceed 20% of the ADB grant and can be done prior to grant effectiveness but not later than 12 months before the signing date of the grant agreement.

56. Nauru Rehabilitation Corporation (NRC) will be directly engaged by NUC to complete site preparation. This will be done using government counterpart funds.

C. Procurement Plan

Basic Data

Project Name: Solar Power Development Project	
Project Number: 49450-009	Approval Number: 0664
Country: Nauru	Executing Agency: Department of Finance and Sustainable Development
Project Procurement Classification: B	Implementing Agencies: Nauru Utilities Corporation
Procurement Risk: Low	
Project Financing Amount: \$ 26.98 million ADB Financing: \$22.00 million Non-ADB Financing: \$4.98 million	Project Closing Date: February 2024
Date of First Procurement Plan: September 2019	Date of this Procurement Plan: September

A. Methods, Thresholds, Review and 18-Month Procurement Plan**1. Procurement and Consulting Methods and Thresholds**

57. Except as the ADB may otherwise agree, the following process thresholds shall apply to procurement of plant.

Procurement of Plant		
Method	Threshold	Comments
International Competitive Bidding (ICB) for Plant	\$3,000,000 and higher	
Consulting Services		
Method	Comments	
Quality and Cost Based Selection (QCBS)		

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

58. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
SPDP1	Solar farm; BESS; substation; SCADA	17,500,000	ICB	Prior	1S1E	Q3 2019	

3. Consulting Services Contracts Estimated to Cost \$100,000 or More

59. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
SPDP 2	Project Implementation Consultant (PIC)	1,700,000	QCBS 90:10	Prior	Q3/2019	Full Technical Proposal (FTP)	

D. Consultant's Terms of Reference

60. The Terms of Reference (TOR) for Project Implementation Consultant are provided below:

PROJECT IMPLEMENTATION CONSULTANT (PIC)

TERMS OF REFERENCE (TOR)

A. Introduction

61. The Nauru electrical network is owned and operated by Nauru Utilities Corporation (NUC), a state-owned enterprise, established under the Nauru Utilities Corporation Act of 2011. NUC is responsible for energy generation and energy distribution, and water supply. Nauru predominantly sources its energy through diesel power generators. About 5% of its current energy demand is sourced from renewable energy, of which all is from solar power photovoltaic (PV) installations. A 500-kW ground-mounted solar installation was commissioned in 2016, and a number of residences have rooftop solar PV installations. A 1,000 kW PV installation is under construction. The electrical network comprises 11kV, 3.3KV and LV overhead lines.

62. Asian Development Bank (ADB) provided Government of Nauru (GoN) a transactional technical assistance TRTA to prepare a Nauru power expansion plan. The plan identified that a PV array and battery energy storage system should be constructed. ADB also provided GoN support to prepare a Feasibility Study for the recommended Nauru Solar Power Development Project which will comprise of a 6-megawatt PV plant coupled with a 5 megawatt / 2.5 megawatt-hour battery energy storage system coupled with a SCADA installation.

63. In accordance with ADB advance actions procedures, advance recruitment of a PIC will take place such that award of a PIC contract can be made when ADB financing becomes effective. Advance procurement of a Plant Procurement Contractor (PPC) contractor will also take place. ADB is assisting NUC in preparing Bidding Documents for the Project and will assist NUC in evaluation of bids and negotiation of resulting contract.

B. Contract

64. NUC will be the employer for both the PIC and PPC contracts. NUC will establish a Project Management Unit (PMU) to manage PIC and PPC contracts and coordinate NUC obligations. Both PIC and PPC contracts are planned to be awarded in February 2020. PPC works are to be completed in December 2021. Contract completion is planned for December 2023 to include the 2-year PPC contract defects period

C. PIC Scope

65. The PIC will:

- (i) Represent the client at a kick-off meeting;
- (ii) Undertake an assessment of the design prepared by the PPC for each of their submissions (15%, 50%, 80%, 100%) and advise NUC on where issues have arisen;
- (iii) Undertake an assessment of the PPC's manpower allocation and equipment selection.
- (iv) Confirm the protection settings are appropriate and provide support to NUC to ensure that the required protection is in place.
- (v) Attend Factory Acceptance Tests as agreed with the NUC
- (vi) Attend and review tests of materials prior to their use
- (vii) Review the PPC's operations and maintenance program and plans

- (viii) Support NUC by undertaking site supervision services to witness construction and installation activities and critical tests and key milestones, and verify that the works have been constructed in accordance with the approved design;
- (ix) Support NUC in assessing compliance with environment safeguards including implementation of the environmental management plan (EMP) during the construction and operations phase. This includes monitoring construction and installation activities are in compliance with the approved construction EMP (CEMP);
- (x) Support NUC in mitigating any social safeguards issues during implementation and ensure landowners grievances will be timely and appropriately attended.
- (xi) Support NUC in delivering, monitoring, and reporting on the Gender Action Plan
- (xii) Review the PPC's operations and maintenance manuals
- (xiii) Support NUC in contract administration by reviewing claims submitted by the PPC to the NUC and assisting with project finance management
- (xiv) Support the PMU in the development, implementation and monitoring of a Stakeholder Communication Strategy;
- (xv) Prepare programs to facilitate development of gender strategies
- (xvi) Support NUC during commissioning activities; and
- (xvii) Support NUC during the capacity building process of NUC staff to operate battery and solar system.

D. Tasks

1. Project Management

66. The PIC shall provide independent assessment and advice to NUC on the validity and quantum of the following items:

- (i) Payment claims and issuance of a payment certification;
- (ii) Variation claims;
- (iii) Extension of time claims;
- (iv) Practical and Final Completion certification in accordance with the contract;
- (v) Defects assessment;
- (vi) Assist NUC implement the Stakeholder Communications Strategy; and
- (vii) Determine if any other certifiable items have been achieved in accordance with the contract.

2. Design Review

67. The PIC shall:

- (i) Undertake design review of the PPC's design at each of the key design stages (15%, 50%, 80% and 100%) as well as a review of the PPC's as-built design;
- (ii) Preparation and maintenance of a comments register and ensure comments are returned within 10 business days of submittal by the PPC;
- (iii) Assess the PPC's operations and maintenance plans
- (iv) Issuance of Notices to the Contractor (NTC) and Notices to the Engineer (NTE);
- (v) Attend design meetings to close out comments; and
- (vi) Provide weekly updates on the status of the design to the NUC.
- (vii) Assess the protection systems installed against detailed design to confirm adequacy. As required, assist NUC in updating the protection system and

- (viii) Undertake FAT and SAT inspections. Note that this is to be presented as an optional extra to the scope and it is assumed that there will be two visits undertaken in China for a period of two weeks per inspection.

3. Construction Supervision

68. The PIC shall undertake the following:

- (i) As Project Manager, undertake full time site surveillance during the construction period to witness key construction activities and verify against the specification. It should be assumed that the construction period will last 24 months, be made up of 23 months of construction, supply, and installation activities and 1 month to assist in identifying and closing defects;
- (ii) Provide support to the Employer during the defect liability period of 12 months
- (iii) Review and clear the PPC's CEMP Safety Plan and Quality Plan;
- (iv) Undertake inspections, audits, and checks to ensure compliance with the approved CEMP. Issue, through the Resident/Supervising Engineer, instructions to contractor/corrective actions as required for non-compliances;
- (v) Assess materials and equipment as required
- (vi) Review any plans developed by the PPC during their construction, supply, and installation activities;
- (vii) Provide weekly reports to the NUC of progress, including as a minimum:
 - Progress against schedule;
 - Risks;
 - OHSE compliance;
 - Projected works for the following week; and
 - Key events for that week.
- (viii) Provide a consolidated monthly report and support NUC to prepare and submit the semi-annual safeguards and gender monitoring report; and
- (ix) Witness Pre-commissioning, Commissioning, Guarantee Tests and Operational Acceptance activities to confirm compliance to the specification and PPC's commissioning, testing and acceptance plan.

4. Social and Gender

69. The PIC shall undertake the following:

- (i) Provide support to NUC to implement the project Gender Action Plan (GAP) and Stakeholder Communications Strategy (SCS) and assist in activities relating to land leases as identified in the Land Due Diligence Report (DDR).
- (ii) Assist NUC in monitoring the GAP, SCS and DDR implementation;
- (iii) Serve as resource person in the conduct of social safeguards, gender, and communications training activities; and
- (iv) Support all monitoring and evaluation activities as they relate to social safeguards, gender, and project-related communications.

5. Capacity Building

70. The PIC shall undertake the following:

- (i) Review the support systems provided by the PPC;

- (ii) Review the operation and maintenance manuals provided by the PPC;
- (iii) Undertake workshop sessions with the NUC on the operational requirements of the BESS, solar and communications system; and
- (iv) Provide responses to questions from the NUC on an ad-hoc basis on the operations and maintenance of the BESS, solar and communications system for a period of 6 months after handover.

E. Qualifications, Tasks, and Level of Effort of Specified Key Experts

#	Expert	Tasks	Qualifications	Level of Effort (Person Months)
International Experts				
1	Solar Energy Expert and Team Leader:	<p>Project Manager Tasks</p> <ul style="list-style-type: none"> (i) Prepare the detailed work program and implementation schedule; (ii) Monitoring the financial performance of the project; (iii) assessing Contractor's claims; (iv) Coordinate the input and activities of the consultant team; (v) Review Contractors' project implementation schedules; (vi) Assist the PMU Manager in controlling budgets; (vii) Develop a project performance monitoring system, including collection of sex-disaggregated data; and (viii) Prepare quarterly progress report and project completion report in ADB formats. <p>Solar Energy Expert Tasks</p> <ul style="list-style-type: none"> (i) Review existing documents and data relating to all subprojects; (ii) Review the contractors engineering design, documentation, equipment selection and test program; (iii) Review the proposed material by the Contractors used in construction/fabrication work and ensure that they comply to specification; (iv) Review Contractors' plans for pre-commissioning, test-run, and final acceptance procedure; and (v) Develop operation and maintenance (O&M) strategy. 	<ul style="list-style-type: none"> • A graduate degree in engineering • 15 years of experience in renewable energy infrastructure development projects • Experience in Pacific region and familiarity with ADB's procurement, disbursements, and project monitoring requirements is desirable. 	12
2	Battery Energy Storage System (BESS) Expert	<ul style="list-style-type: none"> (i) Review the contractors' BESS designs; (ii) Supervise the installation of the BESS to ensure effective integration, training, and efficient operation of the electrical system; (iii) Review Contractors' concept designs, construction materials and the construction process; (iv) Attend and review the material tests; (v) Assist in the supervision of construction; (vi) Review the O&M training programs, the O&M procedure manuals; (vii) Assess the testing and commissioning process; (viii) Undertake site visits to establish the project progress and effectively monitor the project progress and assess the contractor's claims; and (ix) Witness testing and commissioning phase. 	<ul style="list-style-type: none"> • a graduate degree in engineering • 10 years of experience to include integration of BESS into a high penetration renewable energy system 	5
3	Electrical and Control Systems	<ul style="list-style-type: none"> (i) Review existing documents and data relating to all subprojects; (ii) Review contractor power system studies; 	<ul style="list-style-type: none"> • a graduate degree in engineering; 	2

#	Expert	Tasks	Qualifications	Level of Effort (Person Months)
	Engineering Expert	<ul style="list-style-type: none"> (iii) Review contractors process, procedures and design for grid connection, grid synchronization and protection to ensure compliance with Employers Requirements; (iv) Review Contractors' concept designs, construction materials and the construction process; (v) Attend and review the material tests; (vi) Assist in the supervision of construction; (vii) Review the O&M training programs, the O&M procedure manuals; (i) Assess the testing and commissioning process; (ii) Undertake site visits to establish the project progress and effectively monitor the project progress and assess the contractor's claims; (iii) Witness testing and commissioning phase; and (iv) Review proposed integration and control strategy and procedures. 	<ul style="list-style-type: none"> • 10 years of experience in electrical systems and control and instrumentation engineering to include renewable energy project, small hybrid power systems and mini-grid projects. 	
4	Civil/ Structural Expert	<ul style="list-style-type: none"> (i) Review existing documents and data; (ii) Review Contractors' concept designs, detailed designs, and drawings for the projects; (iii) Review the proposed construction materials and the construction process proposed by the Contractor(s); (iv) Coordinate with the PMU to provide supervision of site civil and structural works at key milestones, including documenting evidence to support progress claims; (v) Assist PMUs in monitoring compliance with soil and erosion control measures as per the approved construction environmental management plans; (vi) Review and approve any changes proposed by the Contractor(s) from the original design based on site conditions; (vii) Contribute to monthly, quarterly, annual and any other reporting required of the PMUs; and (viii) Prepare Design Review/Acceptance reports, Test Reports and Site Records 	<ul style="list-style-type: none"> • A graduate degree in civil or structural engineering. • 10 years of experience to include construction of PV arrays in remote locations • Experience of the Pacific region is desirable. 	2
5	Environment Specialist	<ul style="list-style-type: none"> (i) Ensure compliance of project implementation with the ADB's Safeguard Policy Statement, 2009, and Nauru laws and regulations; (ii) Assist NUC to implement the monitoring aspects of the project's environment management plan (EMP); (iii) Ensure that the initial environmental examination (IEE) (including EMP) are updated based on detailed design and integrated into the bid documents for the works; (iv) Review, and make recommendations to strengthen as required, the contractors construction environmental management plan (CEMP) and ensure that it complies with the IEE and EMP and all contractual and environment safeguard requirements; (v) Establish and implement a monitoring system for the project including checking and inspecting CEMP compliance, support GRM implementation and monitoring and to ensure all works implemented are in accordance with the approved CEMP; 	<ul style="list-style-type: none"> • a graduate degree in environment or relevant field • 8 years of experience in environmental assessment, management and monitoring of development projects • Experience in the Pacific region is desirable. 	3

#	Expert	Tasks	Qualifications	Level of Effort (Person Months)
		(vi) Working with the Resident/Supervising Engineer recommend instructions and/or corrective actions where monitoring identifies non-compliance with the CEMP; (vii) Assist PMU to review contractors monitoring reports and contractor's monthly reports (safeguards matters); (viii) Report on monitoring results, particularly CEMP implementation, effectiveness of environmental impact mitigations and corrective actions in: (a) inputs to PMU quarterly progress reports; and (b) semi-annual safeguards monitoring reports; and (ix) Provide training and capacity development to NUC and government departments as required.		
6	Social Safeguards and Gender Specialist	(i) Monitor overall project implementation particularly in identifying any unanticipated social risks, resettlement impacts, and/or sensitive gender impacts. If such risks and/or impacts eventuate, adjust, adapt, and/or develop and facilitate implementation of appropriate mitigation measures including preparation of safeguards documents as necessary; (ii) Implement and monitor gender activities in the GAP and DMF; (iii) Carry out a gender gap analysis of NUC and develop a gender strategy and relevant gender policies for discussion and approval; (iv) Deliver gender training and awareness raising activities; (v) Work with NUC to develop a gender knowledge product; (vi) Monitor and ensure project compliance with ADB Safeguard Policy Statement (2009) regarding the activities outlined in the due diligence report such as the need to set-up grievance redress mechanism, prepare semi-annual safeguards or any corrective actions report as required and implement project's Stakeholder Communications Strategy and with the ADB Gender and Development (GAD) policy and strategy; (vii) Monitor any grievances relevant to social, land, resettlement, and gender issues and the measures implemented to address those grievances in a timely and appropriate manner; and (viii) Assist the PMU to prepare quarterly progress reports and semi-annual safeguard and gender monitoring reports as well as project completion reports as required by ADB.	<ul style="list-style-type: none"> • a graduate degree in social science, and/or other relevant field • 8 years professional experience • Experience in gender analysis and assessments, preferably in the energy sector • Experience in the Pacific region and with government agencies on similar donor funded projects is desirable. 	6
National Experts				
7	National Environment and Safeguard Specialist	Working under the guidance of the international safeguard expert(s) to work closely with PMUs to: <ol style="list-style-type: none"> (i) Supervise safeguard activities by contractor; (ii) Ensure compliance with environmental and social safeguard provisions of the project; and (iii) Assist PMUs in preparing monthly and semi-annual safeguard monitoring reports. 	<ul style="list-style-type: none"> • A graduate qualification in environment or social science • 5 years of professional experience 	8

#	Expert	Tasks	Qualifications	Level of Effort (Person Months)
8	National Engineer	Working under the guidance of the international engineering expert(s) to work closely with PMUs to: <ol style="list-style-type: none"> (i) Supervise engineering activities by contractor; (ii) Monitor construction progress; (iii) Ensure compliance with approved design; and (iv) Assist PMUs in preparing monthly and semi-annual safeguard monitoring reports 	<ul style="list-style-type: none"> • A graduate qualification in engineering • 5 years of professional experience 	8

Notes:

1. A single expert may be offered to cover environment and social safeguard positions.
2. International experts should spend at least 60% of time in Nauru.
3. National experts include nationals from Nauru and Fiji.

F. The PIC will deliver the following reports:

- (i) Inception Report. This shall be submitted within one month after the Inception Mission. It shall contain the updated implementation plan, schedule of personnel deployment, and detailed approach and methodologies for implementation. An inception workshop will be conducted with the PMUs, Contractor(s) and ADB within 4 weeks from notice to proceed to discuss the proposed program of activities and to seek feedback on improvements, which will be reflected in the inception report;
- (ii) Monthly Progress Reports. This shall be submitted by the end of the first week of the succeeding month during the consulting service period. This shall contain (i) the latest progress status against the targets set in the initially agreed implementation plan in the inception report, (ii) justification for any major variations, and (iii) mitigation measures to minimize any further variations;
- (iii) Semi-Annual Safeguards and Gender Monitoring Reports. This shall be submitted every 7th month covering the previous 6 months during the consulting service period. These reports are required to be prepared in accordance with ADB's Safeguard Policy Statement (2009) and Gender and Development Policy;
- (iv) Interim Report. This shall be submitted 12 months after Notice to Proceed. This shall contain achievement of the project in relation to the targets set in the TOR and agreed implementation plan (including the GAP). It shall include key findings of project-supported workshops, and key progress, monitoring and evaluation data to enable overall project monitoring;
- (v) Final Report. This shall be submitted one month prior to the end of the assignment, including accomplishments under the project, challenges faced, and lessons learned and comparison between estimates vs. actual outputs - for instance, technical, financial, economic, and environment, gender and social safeguards, etc. Following submission, a final review workshop will be conducted with relevant government agencies, stakeholders and ADB. The final workshop will summarize the final report.

VI. SAFEGUARDS

71. Safeguards due diligence has been undertaken in accordance with ADB's Safeguard Policy Statement (SPS, 2009).

72. **Environment.** The project is category B for environment according to the SPS. The initial environmental examination (IEE) confirms the project will have no significant impacts on environmental and social attributes of the project impact area (site and haulage routes). The area to be cleared is 8.0 ha of land previously mined for phosphate. Another solar facility financed by the Government of New Zealand will be located adjacent to the project site. The site has no remaining ecological or conservation value. Most of the adverse impacts will be created during the pre-construction (site clearance and preparation) and construction phases and can be mitigated and managed. The IEE includes an environmental management plan (EMP) and outlines the requirements for separate site-specific EMPs (SEMP) to be prepared for the site clearance and installation activities.

73. During operation, adverse impacts are identified to be negligible, except for generation of cleaning water or used oil from routine spraying and maintenance of panels to remove dust accumulation to increase power generation efficiency. The project will provide benefits through a reduction in carbon emissions of 278,875 CO₂e tonnes over the 25-year lifespan of the project. The SEMP prepared by NRC and SEMP prepared by the PPC contractor will be reviewed and cleared by NUC, PIC and ADB prior to any activities commencing at the site. The implementation of the SEMP will be monitored by an independent engineer and environmental specialist recruited through retroactive financing and the SEMP will be monitored by the NUC and PIC, under the direction of the DCIE. The NUC will prepare and submit semi-annual safeguards monitoring reports which will be disclosed on NUC's website.

74. **Involuntary resettlement and indigenous peoples.** The project has been categorized as category C for involuntary resettlement and category C for indigenous peoples, following the requirements of SPS. The project will be implemented within an area of land that has been leased by NUC since 2017. The project will not result in physical or economic displacement or involuntary resettlement. The project team undertook consultations with representatives of landowners and confirmed land ownership with the Department of Lands, resulting in a due diligence assessment on compliance with government laws and ADB's Safeguard Policy Statement.¹³ Corrective actions identified during due diligence have been completed by NUC, and the PIC will provide support to NUC to improve their tracking system to better monitor payments in the future. Other key stakeholders from government and private sector and landowners will continue to be consulted during implementation.

75. Nauru does not have indigenous peoples, as defined under the SPS. Roughly 94% of its people are descendants of the original inhabitants, with the remaining 6% originating from a number of countries.

76. **Prohibited investment activities.** Pursuant to ADB's SPS, ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS.

VIII. GENDER AND SOCIAL DIMENSIONS

77. The project is categorized as effective gender mainstreaming and a Gender Action Plan has been prepared. A social and gender specialist will be engaged intermittently to support NUC in meeting the gender targets for the project, and NUC has appointed a Gender Focal Point to support the Gender Action Plan implementation. Semi-annual monitoring reports for safeguards and gender (separate reports) will be submitted featuring sex disaggregated data, and detailed reporting against the Gender Action Plan and gender indicators in the DMF. The Gender Action Plan focuses on the improvement of women's economic empowerment, the reduction of barriers facing women in male-dominated work environments, and support for women in leadership and technical roles.

78. Nauruan women face discriminatory stereotypes that constitute barriers to their full and equal participation in the workforce.¹ In government, there are significantly less women in positions compared to men. This is mirrored in NUC, in which 17.5% of employees are women. NUC's workforce is highly segregated with female employees almost entirely in Human Resources, Finance and Customer Service. This is due to societal norms, pressures placed on women within families/home life, and barriers, such as harassment, in the workplace. NUC does not have a set of policies specifically addressing gender, nor has it completed a gender assessment or developed strategies, despite the gender imbalances. Recruitment of women for NUC is compounded by the overall difficulty in employing Nauruans with technical qualifications and experience, given the small population. NUC will be supported during the project to develop a gender strategy, creation of gender policies, and provision of training and capacity building initiatives. Gender targets have been set for employment within the project.

79. There are some risks of communicable diseases, sexual transmitted diseases (STDs) and possible cases of HIV/AIDS as a result of employment created by the project, although there will only be a small number of expatriate workers. There are only three known cases of HIV/AIDS on the island, involving visitors seeking medical treatment, although there are high rates of STDs in Nauru. The GAP includes prevention awareness sessions on HIV/AIDS and STDs for project construction and NUC staff, delivered by the Project Implementation Consultants and the construction contractors.

GENDER ACTION PLAN

Activity	Indicator/Target	Responsibility
Output 1 Solar power plant installed; and Output 2 Battery storage system installed		
Gender inclusive project employment created.	<ul style="list-style-type: none"> Hiring of women (10% target) included in the plant procurement contract for the solar power plant and battery storage system (baseline: 0).² Plant procurement contract to include: (i) equal pay for work of equal value, (ii) policies on gender-related core labor standards, include policies against sexual harassment, (iii) gender awareness and sensitivity training requirement for project staff, (iv) separate sanitary facilities for women on site if necessary (including reliable water supply, proper lock and lighting) (baseline: 0). Plant Procurement Contractor required to provide 	Contractor Contractor

¹ 2017. Committee on the Elimination of Discrimination against Women (CEDAW).

² The 1 MW solar project currently being constructed by NUC through a private company (funded by New Zealand Government and European Union) has employed zero women. The project construction phase is likely to employ approximately 30 people. The target is for roughly three women to fill technical and security positions.

Activity	Indicator/Target	Responsibility
	<p>safety gear and protective measures to keep both men and women workers safe on the job.³</p> <ul style="list-style-type: none"> Recruitment notices for project-related jobs with NUC displayed in sites visible to women and will state that women are encouraged to apply (baseline: 0). NUC team involved in the direct implementation, operation and maintenance of the solar power plant and battery storage system to include at least 20% females (baseline: 0).⁴ NUC staff involved in the direct implementation, operation and maintenance of the solar power plant and battery storage system receive equal pay for work of equal value between male and female employees. 	<p>NUC, PPC</p> <p>NUC, PPC</p> <p>NUC, PPC</p>
Capacity building activities directly relating to the project conducted.	<ul style="list-style-type: none"> Technical training and capacity building activities during the project relating to operation of solar-hybrid energy systems involving NUC staff and other government staff/community members to include at least 20% female participation.⁵ At least one workshop held for NUC staff and government staff/community members, with 40% female participants, on ADB policies relating to procurement, anticorruption, and safeguards (baseline: 0) in 2020/2021.⁶ Scholarship opportunities, organised through NUC and leading to project related employment, include at least two women between 2020-2022.⁷ 	NUC, PIC
Awareness training on HIV/AIDS and STD prevention delivered.	<ul style="list-style-type: none"> Requirement for the plant procurement contractor to provide awareness training on HIV/AIDS, STD prevention, child protection, gender sensitivity and gender-based violence for all staff working in Nauru, prior to work in-country by the PPC, including local sub-contractors (baseline: 0). At least one awareness training session on HIV/AIDS, STD prevention and gender-based violence delivered to all staff of NUC prior to construction activities of the PPC commence (baseline: 0). 	NUC, PPC, DoH, PIC
Mechanisms for project decision making, which include women and community, are implemented.	<ul style="list-style-type: none"> Project Steering Committee meetings are to include 20% of women, and at least two representatives of community/affected persons (baseline: 0).⁸ Meetings to be held at least quarterly during project implementation. 	PAD
Awareness of renewable energy	<ul style="list-style-type: none"> At least one school outreach program to increase awareness of renewable energy, including solar, implemented in at least one school in Nauru before project completion (baseline: 0).⁹ 	CIE, PIC

³ Requirement to be included in the Plant Procurement Contractor contract documents.

⁴ The existing NUC Renewable Energy unit has three employees, none are female. It is expected that this team will be expanded to 5-6 persons for the project. The target is for 1-2 NUC female employees to work within the Renewable Energy Unit, with at least one in a technical position.

⁵ Approximately 18% of NUC's workforce (total number of 211) are female. Only four females are in technical teams. During the most recent renewable energy training implemented by NUC there were 20 people in attendance, with only two females (10%).

⁶ Approximately 24 people are expected to participate in the workshop, to be conducted by the Project Implementation Consultant, with support from NUC.

⁷ The target is to focus on at least one technical related scholarship. Between 2013-2018, there were roughly 1-3 scholarship opportunities offered to NUC employees each year, funded by NUC and donors. These were for degree, diploma, and certificate IV courses, and lasted up to three years. During this period, there were 12 male and four female scholarship awardees. There are seven employees currently on a scholarship (one of whom is a female). All three females who have completed the scholarship program have remained as employees of NUC. These have been in the fields of accounting (2) and management (1).

⁸ It is expected that the Project Steering Committee will have at least nine members, two of whom will be women (Director for CIE, and a community representative).

⁹ Between 40-45% of students graduating high school between 2016-2018 were female.

Activity	Indicator/Target	Responsibility
among students increased.		
Output 3 Institutional capacity of NUC increased		
Gender strategy for NUC developed.	<ul style="list-style-type: none"> An institutional gender analysis of NUC undertaken before end of Q2 2020 (baseline: 0). A gender strategy developed in Q3 2020, which includes actions to support women in leadership and technical positions, gender sensitive policies (e.g. flexible working, maternity benefits and family leave etc), recruit a greater percentage of female staff, and implement capacity building activities (baseline: 0). 	PIC, NUC
Gender awareness and sensitivity among NUC management and staff increased.	<ul style="list-style-type: none"> Annual gender awareness/sensitivity training/refresher courses delivered to all staff, including management.¹⁰ 	PIC, NUC
Gender equality and social inclusion policies introduced.	<ul style="list-style-type: none"> A set of gender equality and social inclusion policies created by 2022, in consultation with staff, and approved by management/Board.¹¹ Awareness activities (such as posters, competitions, etc.) implemented for NUC staff about the new gender equality and social inclusion policies by 2022 (baseline: 0). 	PIC, NUC
Gender Focal Point within NUC assigned.	<ul style="list-style-type: none"> Gender Focal Point position description (tasks) prepared and accepted by NUC management by Q2 2020 (baseline: 0). NUC management assign the role of Gender Focal Point, amending the staff members' position description to include additional tasks and allowing hours per week to complete related tasks and responsibilities by Q2 2020 (baseline: 0). 	PIC, NUC
Support for the Pacific Power Association provided.	<ul style="list-style-type: none"> One knowledge product prepared for the Pacific Power Association Gender Portal before project completion (baseline: 0). 	NUC, PIC
Gender inclusive activities relating to the project are monitored and evaluated.	<ul style="list-style-type: none"> A project performance system, which includes indicators measuring implementation and progress of the gender action plan (and gender strategy) developed by Q2 2020 (baseline: 0). Reports on the progress of GAP activities are submitted quarterly to the Project Steering Committee and ADB (baseline: 0) throughout project implementation. 	PIC, NUC
Awareness of utilities and STEM employment opportunities among secondary students in Nauru increased.	<ul style="list-style-type: none"> At least one school outreach program to increase awareness of utility and STEM related employment opportunities (targeting females) implemented in at least one secondary school in Nauru before project completion (baseline: 0). 	CIE, NUC, PIC
NUC female employees supported through leadership training.	<ul style="list-style-type: none"> Female employees in senior positions and board members of NUC participate in at least four capacity building activities (workshops, conferences, training) relating to women in leadership by 2022.¹² 	NUC, PIC

¹⁰ There are 211 employees in NUC, as at April 2019. NUC has not previously conducted gender sensitivity training for staff. The Social and Gender Specialist within the Project Implementation Consultant will conduct the training; however, it will include a train-the-trainer component for the Gender Focal Point to allow the annual training to continue after the project.

¹¹ While NUC has human resource policies, these do not include a set specifically on gender.

¹² The chairperson of the Board of Directors for NUC is female, along with two other female Directors, resulting in a gender balance of three female and three male Directors on the Board. The management team comprises of 10 individuals, with two of these being females – specifically the Financial Controller and the Manager Human Resources. Capacity building activities can be those offered by Pacific Women Leader's Coalition (PWLC), Pacific Power Association.

Activity	Indicator/Target	Responsibility
<p>Implementation Arrangements: The GAP will be implemented by the Project's Management Unit (PMU) with support from the Project Implementation Consultants (PIC), which will include a Social and Gender Specialist. The specialist will be responsible for supporting the implementation of the GAP, including awareness workshops and establishment of gender-disaggregated indicators for project performance and monitoring. The PMU will include reporting on the progress of GAP activities in quarterly progress reports to the Project Steering Committee, ADB and the Government.</p>		

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

Project Design and Monitoring Framework

<p>Impact A reliable, affordable, secure, and sustainable energy supply to meet the socio-economic development needs of Nauru.</p> <p>The Project is Aligned with 50% of grid electricity supplied from renewable energy sources (Nauru Energy Road Map 2018-2020)^a</p> <p>Viable power generating capacity including alternative (renewable) energy sources (Long-term Milestone 2025, National Sustainable Development Strategy 2005-2025)^b</p>			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome	By end of calendar year 2023:		
Utilization of renewable energy within the grid is increased and cost of electricity generation is decreased.	<p>a. Solar power generation increased by 12,450 MWh in calendar year 2023. (end of FY 2017-2018 baseline: 1,180 MWh of solar power generated)</p> <p>b. Additional 11,155 tonnes of carbon dioxide emissions avoided per year due to the reduction in diesel being used for the grid. (end of FY 2017-2018 baseline: 1,062 tonnes).</p>	a. NUC Annual Report	Growth in demand leads to increased diesel consumption. Potential difficulties in managing the grid because of instability as a result of integrating renewable solar generation.
Output	By end of calendar year 2023:		
1. Solar power plant installed	<p>a) A 6-megawatt ground mounted solar array is installed (end of calendar year 2019 baseline: total of 1.9MW solar power plants installed)</p> <p>b) Substation and transmission linkages, technology systems and associated facilities are constructed, commissioned, and connected to the solar array, battery storage system and grid (2018 baseline: 0)</p> <p>c) NUC team involved in the direct implementation, operation and maintenance of</p>	NUC reports; Quarterly progress reports; Project completion report	<p>Risks:</p> <ul style="list-style-type: none"> • Delays in site preparation by the government. • Delays and risks in shipping components and equipment. <p>Assumptions:</p> <ul style="list-style-type: none"> • NZ MFAT 1MW is installed in 2019 (to contribute to baseline). 400kW roof top installed. • Bidders will respond to business opportunity.

	the solar power plant and battery storage system included at least 20% females, and 10% during the construction phase (baseline: 0)		
2. Battery storage system installed	By end of calendar year 2023: A 2.5-megawatt hours / 5 megawatts battery storage system is installed (2018 baseline: 0).	NUC reports Quarterly progress reports Project completion report	Risks: <ul style="list-style-type: none"> • Delays in site preparation by the government. • Delays and risks in shipping components and equipment.
3. Institutional capacity of NUC strengthened	By end of calendar year 2023: <p>a) NUC has increased capacity to procure and operate solar power plant</p> <p>b) NUC has increased institutional capacity to integrate battery storage systems and solar plants within the grid (2018 baseline: no prior experience of NUC with large solar power plans and battery storage systems)</p> <p>c) NUC has a gender policy and a gender strategy that includes activities to support women in leadership and technology roles.</p>	Institutional capacity building completion report Quarterly progress reports Project completion report	<ul style="list-style-type: none"> • Staff turnover following training programs and capacity building activities. • Inability of NUC to recruit and retain qualified technical personnel for the project operations phase.
<p>Key Activities with Milestones (completion)</p> <p>1. Solar power plant and battery storage system installed</p> <p>1.1 Prepare procurement and bidding documents for the Plant Procurement Contractor (supported through TA 9242) (done)</p> <p>1.2 Advertise invitation for bids (supported through TA 9242) (Q3 2019)</p> <p>1.3 Sign PPC contract (Q1 2020)</p> <p>1.4 Install solar power plant (Q2 2020–Q2 2022)</p> <p>1.5 Provide technical advice during commissioning and testing stage to ensure solar power generation integrates within the grid with few stability issues (Q4 2021)</p> <p>1.6 Conduct defects liability period activities (Q2 2022–Q3 2023)</p> <p>2. Battery storage system installed</p> <p>2.1 Prepare procurement and bidding documents for the Plant Procurement Contractor (supported through TA 9242) (done)</p> <p>2.2 Advertise invitation for bids (supported through TA 9242) (Q3 2019)</p> <p>2.3 Sign PPC contract (Q1 2020)</p> <p>2.4 Install battery storage system (Q2 2020 – Q2 2022)</p> <p>2.5 Provide technical advice during commissioning and testing stage to ensure the battery storage integrates within the grid with few stability issues (Q4 2021)</p> <p>2.6 Conduct defects liability period activities (Q2 2022–Q3 2023)</p> <p>3. Organizational capacity of NUC strengthened</p>			

<p>3.1 Support NUC to prepare and advertise Plant Procurement Contractor (PPC) bidding documents, conduct bid opening, prepare bid evaluation report, negotiate contract, and issue contract award (Supported by TA 9242) (Q3 2019–Q1 2020)</p> <p>3.2 Support NUC to prepare and advertise Project Implementation Consultant bidding documents, conduct bid opening, prepare bid evaluation report, negotiate contract, and issue contract award (Supported by TA 9242) (Q3 2019–Q1 2020)</p> <p>3.3 Provide NUC capacity building when reviewing detailed designs or specifications of Plant Procurement Contractor for Outputs 1 and 2 (Q2 2020)</p> <p>3.4 Provide capacity building during the supervision of site preparation and installation stages for Outputs 1 and 2 (Q1 2020–Q1 2022) and their defects liability periods (Q2 2020–Q3 2023)</p> <p>3.5 Provide institutional strengthening training program (Q3 2020–Q3 2023)</p>
<p>Inputs ADB: \$ 22.0 million (grant) Government: \$4.98 million</p>
<p>Assumptions for Partner Financing Not Applicable</p>

ADB = Asian Development Bank, EPC = Engineering, Procurement and Construction, IPP = Independent Power Producer, NUC = Nauru Utilities Corporation, SCADA = Supervisory control and data acquisition, TA = Technical assistance.

^a Government of Nauru. 2014. Nauru Energy Road Map 2014-2020. Nauru.

^b Government of Nauru. 2005. Nauru Sustainable Development Strategy 2005–2025. Nauru.

Source: Asian Development Bank.

A. Monitoring

80. **Project performance monitoring.** The PMU will prepare quarterly monitoring reports, including sex-disaggregated baseline data as required, for output and outcome indicators. The quarterly progress reports will provide information necessary to update ADB's project performance reporting system. Regular review missions will be conducted by ADB to monitor the project. Quarterly progress reports will include monitoring and reporting of environmental and social safeguards and gender indicators.

81. **Compliance monitoring.** Compliance with the obligations of the government and NUC will be (i) monitored in accordance with the legal agreements, (ii) summarized in the quarterly progress reports, (iii) discussed during project steering committee meetings, and (iv) reviewed during two review missions each year. NUC, supported by PIC, will be responsible for monitoring compliance by and issuing corrective action requests to the government, consulting firms, and contractors when covenants are breached and will be responsible for keeping ADB informed of such events.

82. **Safeguards monitoring.** Environmental and social safeguard monitoring reports will be submitted on a semi-annual basis and will include details on grievances recorded and resolved. As there are no indigenous peoples, or involuntary resettlement dimensions identified under this project, no structured monitoring of these dimensions is foreseen, with the exception of confirmation of this during semi-annual safeguard monitoring report. The EMP, ESMS and GRM will be monitored by the Environment Specialist within the PIC, as well as the Energy Division within the Department of Commerce, Industry and Environment. The social and gender specialist will assist NUC in implementing the Stakeholder Communications Strategy, and with conducting regular stakeholder consultations with landowners and other key stakeholders. Details of the progress of implementation of the Stakeholder Communications Strategy will be reported in the semi-annual safeguards reports, as well as grievances received. Project officer review missions will confirm that the indigenous peoples, and involuntary resettlement categorizations remain valid and appropriate.

83. **Gender and social dimensions monitoring.** A social and gender specialist within the PIC team (with support from a gender focal point within NUC) will support the implementation of and reporting on the Gender Action Plan. Reports on progress of implementation of the GAP will include data collection for indicators of gender participation in community consultation, training activities and employment statistics, as well as other targets set out in the Gender Action Plan and DMF. Reporting against the Gender Action Plan (GAP) will be submitted on a semi-annual basis.

84. Monitoring tools will include minutes of meetings, consultations and records from training and workshops, employment numbers (increase-decrease), qualitative interviews and case studies where appropriate, and other aspects. The data collected will be gender disaggregated. Recommendations, including corrective action plans, will be included if specific gender targets/indicators are not met.

B. Evaluation

85. ADB will conduct regular reviews throughout implementation, as well as a midterm grant review. The reviews will monitor (i) project output quality, (ii) implementation arrangements, (iii) implementation progress, and (iv) disbursements. Within six months of physical completion of the project, the DOF will submit a project completion report to ADB. The DOF will submit audited project financial statements within six months after the close of each financial year and entity-level audited financial statements of NUC within one month after their approval by the competent authority.

C. Reporting

86. The DOF will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iii) a project completion report within 6 months of completion of the project. To ensure that projects will continue to be both viable and sustainable, project accounts and the executing agency audited financial statement together with the associated auditor's report, should be adequately reviewed.

D. Stakeholder Communication Strategy

87. The Stakeholder Communications Strategy that is attached to the RRP provides a mechanism whereby the Nauru Utilities Corporation (NUC), and other relevant government agency staff, PIC, project affected persons, and other stakeholders can exchange their views, ideas and suggestions with regard to project implementation, including monitoring. A fully inclusive participatory process has been shown to engender wider community support, and better relations with stakeholders and community members.

88. The Stakeholder Communications Strategy will ensure compliance with Nauru law, ADB's SPS and Access to Information Policy, NUC's policies, and with local customs. The Stakeholder Communications Strategy activities will provide inputs for the preparation of compliance documents, monitoring and progress reports for circulation to the Project Steering Committee, Executing Agency (Department of Finance and Sustainable Development) and ADB. The strategy has been checked, verified and updated by NUC prior to site preparation activities commencing, and reviewed again prior to grant effectiveness. The process of updating the Stakeholder

Communications Strategy will be the responsibility of NUC and the project implementation consultant.

89. The Stakeholder Communications Strategy has three main outputs. Firstly, it provides a basis to inform stakeholders about the project, its activities, how they will benefit, potential impacts and other relevant information. This disclosure will help to understand the nature, rationale, outputs, and timeline of the project. This engagement will aim to facilitate wide community and institutional support for the project, while also hoping to avoid unnecessary delays in project implementation. It also triggers people's interest in the long-term security of the project site. Secondly, the Stakeholder Communications Strategy is a mechanism that allows stakeholders to provide feedback with regard to social and environmental impacts, mitigation measures, and other issues relating to project implementation. It will give NUC information about the opinions, needs, and priorities of stakeholders, and may identify impacts and sensitivities not recognized during project preparation or raise alternative proposals or new mitigation methods that would be useful. The objective of such interaction is to get good local feedback from government and community sources, in order to improve project implementation and avoid conflict, costly delays or frustrations. Thirdly, the Stakeholder Communications Strategy is a means for checking and verifying environmental and socio-economic information from local stakeholders. This is important as it will support the updating and implementation of the environmental management plan, thereby facilitating project implementation and ensuring accuracy and transparency in project activities.

90. The Stakeholder Communications Strategy is integrated and harmonized with other related documents such as the grievance redress mechanism (GRM) and the environmental management plan within the IEE. Community members and other stakeholders want to be consulted but may experience fatigue if asked to attend too many meetings, so consultation needs to be well planned and have outcomes within a reasonable time frame.

91. The Stakeholder Communications Strategy was disclosed along with the Report and Recommendations of the President on the ADB website. All members of the Project Steering Committee will be given a briefing on the Stakeholder Communications Strategy by NUC and the PIC and copies made available to them for information. The social and gender specialist and/or environment specialist within the PIC will make arrangements to also disclose the GRM and stakeholders will be encouraged to air any grievances through public participation events, as well as through the individual GRM process. There will be at least one widely publicized public consultation event on the island. Although no project sites are expected to have significant impacts on the community or the environment, people will be adequately informed of planned works, so that there is community support for the project. It will be the responsibility of the NUC, with support from the PIC to assess requirements for public participation, and to take leadership in organizing events. The main lesson from experience is that consultation needs to be seen as a routine on-going procedure, rather than a one-off event.

92. Publicity for consultation events will be organized by NUC and the Government Information Office within the Office of the President. Details of the consultation events will be publicized in the Nauru Bulletin, which is a fortnightly publication of the Government of Nauru and is produced by the Government Information Office. It will also be publicized on Nauru Radio on the government radio segment and/or on the local news program on Nauru TV and Nauru Radio. Notices will be displayed in NUC's customer office in Yaren. NUC will use its own funds for publication of notices and printing of the information brochure/pamphlet. All consultations will be delivered in Nauruan language, where required.

X. ANTICORRUPTION POLICY

93. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.¹ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.²

94. To support these efforts, relevant provisions are included in the grant agreement/regulations and the bidding documents for the project. Additionally, the government will: (i) comply with ADB's Anticorruption Policy (1998, as amended to date), and cooperate fully with any investigation by ADB and extend all necessary assistance, including providing access to all relevant files, books and records for the satisfactory completion of such investigation; (ii) ensure that relevant staff are trained in ADB's Anticorruption Policy; (iii) ensure that the audited annual project accounts under the project, quarterly progress reports, and procurement activities are disclosed on a relevant government website; and (iv) allow and facilitate ADB's representatives to conduct spot and random checks on (a) flow of funds, and their use for the projects in accordance with the legal agreements; (b) work-in-progress; and (c) project implementation.

¹ Anticorruption Policy: <https://www.adb.org/documents/anticorruption-policy>.

² ADB's Office of Anticorruption and Integrity web site: <https://www.adb.org/site/integrity/sanctions>.

XI. ACCOUNTABILITY MECHANISM

95. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.¹

¹ Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

96. All revisions and/or updates during the course of implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including revision to contract awards and disbursement s-curves.