United Nations Development Programme

Government of Niue

Mid-Term Review of UNDP/GEF Project: *Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN Project)*

(GEF Project ID: 9752; UNDP PIMS ID: 6037)

Report

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SYNOPSIS

Title of UNDP supported GEF financed project: Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN Project)

UNDP Project ID: PIMS 6037

GEF Project ID: 9752

Evaluation time frame: 29 August 2019 to 30 September 2022

CEO endorsement date: 11 July 2019

Project implementation start date: 29 August 2019

Project operational closure: 29 August 2023

Date of evaluation report: 26 January 2023

Region and Countries included in the project: Niue

GEF Focal Area Objective: CCM-1 Program 1, Outcome A. Accelerated adoption of innovative technologies and management practices for GHG emission reduction and carbon sequestration, Outcome B: Policy, planning, and regulatory frameworks foster accelerated low GHG development and emissions mitigation.

Implementing partner and other strategic partners: Department of Utilities, Ministry of Infrastructure (DoU-MOI)

Mid-Term Review team members: Mr. Roland Wong, International MTR Consultant
Ms. Jamal Veidreyaki, National MTR Consultant

Acknowledgements:
The Mid-Term Reviewers wish to acknowledge with gratitude the time and effort expended by all Project participants and stakeholders during the AREAN Mid-Term Review. We wish to thank the UNDP Samoa MCO, the Project Management Unit of the AREAN Project, the Bangkok Regional Hub of UNDP, Department of Utilities, and other key Project stakeholders (both from Government agencies and the private sector) for making the efforts to recall details of their time while on the Project. All were generous with their time in providing their passionate opinions on the potential impact of this Project. We sincerely hope that this report on acceleration of renewables and energy efficiency contributes towards a greener and lower carbon future for Niue.

EXECUTIVE SUMMARY

E-1. This report summarizes the findings of the Midterm Review conducted via virtual meetings between 11-25 April 2022 for the UNDP-GEF Project: "*Accelerating Renewable Energy and Energy Efficiency Applications in Niue",* (hereby referred to as the *AREAN Project, AREAN,* or the Project) that received a US$3,321,563 grant from the Global Environment Facility (GEF) in July 2019.

Project Information Table

Project Title:	***Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN Project)***			
GEF Project ID:	9752		*at endorsement (Million US$)*	*at mid-term (Million US$)*
UNDP Project ID:	6037	GEF financing:	3.322	0.805
Country:	Niue	IA/EA own:	0.100	0.100
Region:	PAC	Government:	9.980	6.005
Focal Area:	Climate Change	Other:	7.626	3.768
FA Objectives, (OP/SP):	FA Objective #3 for GEF 5: Promoting investment in renewable energy technologies	Total co-financing:	17.706	12.873
Implementing Partner:	Department of Utilities, Ministry of Infrastructure	Total Project Cost:	21.028	13.678
Other Partners involved:	N/A	ProDoc Signature (date project began):		29 August 2019
		(Operational) Closing Date:	Proposed: 29 August 2023	Actual: 29 August 2023

Project Description

E-2. The main objective of the AREAN Project is to "*to enable the achievement of low carbon energy access, sustainable energy and green growth targets of Niue as stated in the Niue Sustainable Energy Road Map (NiSERM), which is the basis of the country's latest NDC*." It was designed to do so by:

- improving policy and regulatory frameworks in the application of energy efficiency (EE) and renewable energy (RE) technologies in the energy end-use sectors;
- effective enforcement of plans, policies and regulations, and implementation of programs/projects on the application of climate resilient and low carbon technologies in the end-use sectors;
- increasing availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors;
- adopting and implementing climate resilient and low carbon techniques and practices in the energy supply and energy end-use sectors;
- enhancing confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors.

Project Progress Summary

E-3. The AREAN ProDoc was signed on 1 October 2019 with an intended duration of 48 months (until July 2023). Progress and achievements can be summarized as follows:

- no progress towards mid-term targets of the Project objective of 4,108 tCO_{2eq} cumulative direct GHG emissions reduced and other targets (Para 33);
- supply and installation of 290 kWp of solar PV systems, most of which have been put off-line (Paras 34-35);
- establishment of a US$150,000 high energy efficiency household appliances rebate scheme which has not yet been disbursed (Para 42);
- the most significant challenges are the issue of severe grid instability issue for 543 kWp of solar PV installations as well as issues with batteries and inverters. Without this solar PV capacity on the grid, Niue will be unable to achieve its AREAN target of 73% renewable energy by the EOP.

This was not good progress notwithstanding the COVID-19 pandemic which slowed down all Project activities as of March 2020 (Table 1).

Conclusions

E-4. Despite legislative changes made through the EPSEA 2021, and the restructuring of NPC with new coordination mechanisms established, the AREAN Project has not been making progress towards achievement of NiSERM targets, in part due to shortage of staff and delays in getting expertise and equipment into Niue. This has delayed the resolution of grid instability issues with the new transformers and the actions required to resolve those issues (Paras 74-75).

E-5. There several other issues with AREAN implementation including training for local staff for installation of solar PV systems (that will require expertise from abroad or staff to receive training abroad), and the need for more awareness raising activities to encourage people to choose RE and accelerate the contribution of RE to energy sector in Niue. There are other issues provided in Para 75.

MTR Ratings and Achievement Summary

E-6. Table A contains the MTR ratings and achievement summary.

Lessons Learned

E-7. *Lesson #1: The Niue government have very few people to nationally implement the AREAN Project to the extent that alternatives modalities must be investigated (Para 77).*

Recommendations

E-8. *Recommendation 1 (to UNDP and the GoN): As a top priority, change AREAN management arrangements that will result in an increased role of UNDP in providing support services to NIM, hence reducing the transactional burden of the AREAN Project for GoN counterparts (Para 78).*

E-9. *Recommendation 2 (to the GoN): As another top priority, automate the diesel/petrol levels used for power generation at NPC as a part of Outcome 4 (Para 79).*

E-10. *Recommendation 3 (to UNDP and the GoN): As another high priority, complete the grid stability study, complete upgrades, and complete capacity building activities so that solar PV panels already installed can be reconnected to the grid as a part of Outcome 4.1 (Para 80).*

E-11. *Recommendation 4 (to UNDP and the GoN): Request a 12-month extension from GEF to utilize the remaining AREAN resources of US$ 2.517 million towards achievement of GHG emission reduction target of 9,242 tCO_2/yr (Para 81).*

E-12. *Recommendation 5 (to UNDP and the GoN): As a lower priority, implement other demonstration low carbon projects that help the Project reach its GHG emission reduction targets but in a less significant way (Para 82).*

E-13. *Recommendation 6 (to UNDP and GoN): Improve the RE awareness raising programme of AREAN as a part of Outcome 5 (Para 83).*

E-14. *Recommendation 7 (to UNDP and GoN): Ensure gender mainstreaming is regularly monitored for gender progress (Para 84).*

Table A: MTR Ratings & Achievement Summary Table for "AREAN" Project in Niue

Measure	MTR Rating[1]	Achievement Description
Project Formulation	Design and PRF	Despite AREAN Project design being rated highly satisfactory, there is a need to implement remaining aspects of the Project strategy with remaining AREAN resources that aligns with updated GoN national priorities of NiSERM that meets the overall cumulative GHG emission target of 9,242 tCO_{2eq} (Paras 31).
	Stakeholder Participation Rating: 5	There were many stakeholders who were consulted for the design of the AREAN Project (Para 23).
Progress Towards Results	Objective Achievement Rating: 3	Project has made no progress due to the absence of the setup and deployment of low carbon technologies using GEF funds (Para 33).
	Outcome 1 Achievement Rating: 5	The Electric Power Supply and Energy Amendment Bill 2021 establishes and implements sectoral codes of conduct, guidelines and standards of operations for the energy industry, and updates standards and legislations set up with the 1960 EPSA (Paras 37-38).
	Outcome 2 Achievement Rating: 5	GoN's restructured plans and policies provide better conditions to meet the 80% renewable supply by 2030. This is with all the solar power PV panels in Niue feeding power into the grid with data of the micro grid and the powerhouse being online (Para 40).
	Outcome 3 Achievement Rating: 4	US$150,000 was ready for rollout in 2022 with Niue Development Bank to subsidize purchase of electrical appliances with 4-star rating, facilitating a behavioral change and incentive for all Niueans. This activity was delayed, however, due to the need to align it with the UNDP financial instrument requirements, guidelines and rules (Para 42).
	Outcome 4 Achievement Rating: 3	An integrated RE generation forecasting tool for a SCADA system was installed which automates the operations of remote solar PV power systems and data collection. However, a grid stability study has still not yet been completed for the island (Para 44).
	Outcome 5 Achievement Rating: 3	Progress on demonstration activities has been adversely affected by delays in procurement in specialized equipment, shortages in staffing and delays in receiving funds (Para 46).
	Outcome 6 Achievement Rating: 4	Though GoN personnel were trained on conducting energy audits and managing energy databases, monitoring, and reporting, training for energy audit system design is currently awaiting availability of trainers (Para 48).
Project Implementation & Adaptive Management	Implementation Approach Rating: 3	One of the major challenges for the Project has been shortage of staff. The Project has especially had difficulties supporting set procedures, protocols and complex administration of funds with UNDP (Paras 55-76).
	Monitoring and Evaluation Rating: 5	The M&E systems of the AREAN Project are rated as ***moderately satisfactory*** considering the reporting of the progress against the AREAN PRF and the activities of the AREAN Project (Para 63).
	Stakeholder Participation Rating: 4	Though AREAN stakeholder engagements have been with the national government agencies, there are still stakeholders that have not yet been engaged due to Project activities not yet being started involving those stakeholders (Para 64-65).
Sustainability	Sustainability Rating: 2	Financial risks to the sustainability of the AREAN Project are related to the limited availability of financing from the GoN and donors (Para 69-73).
Overall Project Achievement and impact	Rating: 3	The Project is not achieving a desired impact on NiSERM, due to staff shortages, delays in getting expertise and equipment into Niue, and a lack of communications between AREAN staff, PMCU and NPC leading to a lack of AREAN ownership (Paras 74-76).

[1] Evaluation rating indices (except sustainability – see Para 70): 6=*Highly Satisfactory (HS)*: The project has no shortcomings in the achievement of its objectives; 5=*Satisfactory (S)*: The project has minor shortcomings in the achievement of its objectives; 4=*Moderately Satisfactory (MS)*: The project has moderate shortcomings in the achievement of its objectives; 3=*Moderately Unsatisfactory (MU):* The project has significant shortcomings in the achievement of its objectives; 2=*Unsatisfactory (U)* The

ABBREVIATIONS

Acronym	Meaning
ADB	Asian Development Bank
AREAN	Accelerating Renewable Energy and Energy Efficiency Applications in Niue
BAU	Business-as-Usual
CCM	Climate Change Mitigation
CTA	Chief Technical Advisor
DoT	Department of Transport
DoU	Department of Utilities
EC	Energy Conservation
EE	Energy Efficiency
EV	Electric Vehicle
GDP	Gross Domestic Product
GHG	Green House Gas
GIZ	Gesellschaft für Internationale Zusammenarbeit
GJ	Giga Joule
GoN	Government of Niue
GoNZ	Government of New Zealand
GW	Giga Watt
GWh	Giga Watt hour
INDC	Intended Nationally Determined Contribution
IRR	Implementing Rules and Regulations
IUCN	International Union for Conservation of Nature
km^2	Square kilometer
kW	kilo Watt
kWh	kilo Watt hour
kWp	kilo Watt peak
LC	Low Carbon
LCD	Low Carbon Development
LPG	Liquefied Petrol Gas
MCO	Multi-Country Office
MoI	Ministry of Infrastructure
MW	Mega Watt
MWh	Mega Watt hour
MWp	Mega Watt peak
M&E	Monitoring and Evaluation
NBF	Niue Bulk Fuels
NDB	Niue Development Bank
NDC	Nationally Determined Contribution
NiSERM	Niue Strategic Energy Road Map
NNSP	Niue National Strategic Plan

project has major shortcomings in the achievement of its objectives; 1=*Highly Unsatisfactory (HU):* The project has severe shortcomings in the achievement of its objectives.

Acronym	Meaning
NPC	Niue Power Corporation
NPD	National Project Director
NZ$	New Zealand Dollar
OFP	Operational Focal Point
O&M	Operation and Maintenance
PALS	Pacific Appliance and Labelling Standards
PB	Project Board
PIC	Pacific Island Country
PIR	Project Implementation Review
PMCU	Project Management and Coordination Unit
PMU	Project Management Unit
PV	Photo Voltaic
PWD	Public Works Department
RE	Renewable Energy
SCADA	Supervisory Control And Data Acquisition
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SOE	State Owned Enterprise
SPC	Secretariat of the Pacific Community
TA	Technical Assistance
$tCO_{2\text{-}eq}$	tonne Carbon dioxide equivalent
ToC	Theory of Change
toe	tonne oil equivalent
UNDP	United Nation Development Program
UNFCCC	United Nations Framework Convention on Climate Change
US$	United States Dollar

1. INTRODUCTION

1. This report summarizes the findings of the Midterm Review (MTR) conducted during the 1 September – 31 October 2022 period for the UNDP-supported GEF-financed Project entitled: "***Accelerating Renewable Energy and Energy Efficiency Applications in Niue***" (hereby referred to as the AREAN Project, Project, or AREAN). In July 2019, this Project received a US$ 3,321,563 grant from the Global Environmental Facility (GEF-6). The Project objective is to "*to enable the achievement of low carbon energy access, sustainable energy and green growth targets of Niue as stated in the Niue Sustainable Energy Road Map (NiSERM), which is the basis of the country's latest NDC*".

1.1 Purpose of the Mid-Term Review

2. In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP-supported GEF-financed projects are required to undergo an MTR at the mid-point of implementation of a project to *provide a comprehensive and systematic account of the performance of an ongoing project by reviewing its design, process of implementation and achievements vis-à-vis GEF project objectives and any agreed changes during project implementation.* This MTR delivers an independent and impartial assessment of the AREAN Project that is comprised mainly of construction, technical assistance, and capacity building activities. As such, the MTR for this Project serves to:

- assess early signs of project success or failure with the goal of identifying the necessary changes to be made to set the Project on-track to achieve its intended results;
- strengthen the adaptive management and monitoring functions of the Project;
- enhance the likelihood of achievement of Project and GEF objectives through analyzing Project strengths and weaknesses and suggesting measures for improvement;
- enable informed decision-making by identifying and validating proposed changes to the ProDoc to ensure achievement of all Project objectives;
- create the basis for replication of successful Project outcomes achieved to date; and
- assess whether it is possible to achieve the objectives in the given timeframe, taking into consideration the pace at which the Project is proceeding.

3. This MTR was prepared to:

- be undertaken independent of Project management to ensure independent quality assurance;
- apply UNDP-GEF norms and standards for midterm reviews;
- assess achievements of outputs and outcomes, likelihood of the sustainability of outcomes, and if the Project met the minimum M&E requirements;
- provide credible, useful, and evidence-based information of the Project
- provide recommendations to increase the likelihood of the Project delivering all its intended outputs and achieving intended outcomes;
- bring up key issues that will serve as a means of strengthening learning within the AREAN Project team and its stakeholders to support better decision-making.

1.2 Scope and Methodology

4. The scope of the MTR covers the entire UNDP-supported, GEF-financed, Department of Utilities under the Ministry of Infrastructure (DoU) executed AREAN Project. This MTR assesses 40 months of Project progress, achievements and implementation taking into account the status of Project activities, outputs and the resource disbursements made up to 31 December 2022. The MTR estimates the extent of barrier removal in each Project component by reporting on the progress against objective, outcome, output, and impact indicators listed in the latest Project Results Framework (PRF) as provided in Appendix F. The MTR report concludes with recommendations, as appropriate, for the key stakeholders of the Project. The MTR was approached through criteria of *relevance, effectiveness, efficiency, sustainability*, and *impact*, as defined, and explained in the UNDP "Guidance for Conducting Midterm Reviews of UNDP-supported, GEF-financed Projects"[2], and the GEF M&E policy. The MTR Team was comprised of one international MTR consultant and one national MTR consultant. The MTR process was conducted in a spirit of collaboration with the provision of constructive inputs that will inform activities of this Project.

5. The AREAN Project was reviewed in the context of:

- *Project strategy:* This includes an analysis of the AREAN Project design (and Project Results Framework) as outlined in the ProDoc to identify if the strategy is effective in achieving the desired outcomes;
- *Progress towards results:* This is to include information provided from, amongst others, Project work plans, Project implementation reports (PIRs), relevant Project reports and information provided from various Project stakeholders;
- *Project implementation and adaptive managem*ent: This is an assessment of the quality of support to the Project from UNDP as well as the Executing Agency of the Project, the DoU. Assessment parameters include management arrangements, work planning, finance and co-finance, Project level monitoring and evaluation systems, stakeholder engagement, reporting and communications; and
- *Sustainability:* The likely ability of an intervention to continue to deliver benefits for an extended period after the end-of-Project (EOP). The MTR sustainability assessment essentially sets the stage for the Terminal Evaluation during which sustainability will be rated under the four GEF categories of sustainability, namely financial, socioeconomic, institutional framework, and governance, and environmental.

6. In the context of methodology, the strategy for data and information collection and analysis adopted for this MTR includes:

- review of Project documentation (e.g., APR/PIRs, meeting minutes of Project Steering Committee) and pertinent background information;
- interviews with key Project personnel (including the current Project Manager, Project Coordinators, technical advisors, and Project developers) as well as relevant stakeholders (including other government agencies and private sector entities); and
- virtual visits to Project sites due to the COVID-19 pandemic substituted by interviews with beneficiaries.

[2] http://web.undp.org/evaluation/documents/guidance/GEF/mid-term/Guidance_Midterm%20Review%20_EN_2014.pdf

7. After the review of Project documentation, interviews were conducted with selected stakeholders to gauge the effectiveness and efficiency of "progress towards results". Different key groups involved in the Project to be interviewed included:

- Project team. The purpose of interviews with the UNDP Samoa MCO, UNDP NCE Asia-Pacific and the PMU are the "rich" issues of implementation and execution. Main questions asked involved utilization of GEF grant resources;
- National Executing partners. This involved implementation personnel at the Department of Utilities under the Ministry of Infrastructure. Main questions to be asked are what to do with the GEF grant resources;
- Project partners. This included the Niue Power Corporation (NPC), Department of Transportation – Ministry of Infrastructure (DoT-MoI), the Treasury Department, Niue Chamber of Commerce, Niue Development Bank (NDB) and Kiwibank, as well as other GoN Ministries and Departments. This also involved a wide range of stakeholders that support the Project by providing advice, technical support, and managing challenges and issues raised, and who work closely with Niue Power in providing training;
- Beneficiaries. This may involve the general Niue population.

All interviews with the various stakeholders were to be held face-to-face with the National Evaluator, or virtually on Zoom, Skype or WhatsApp with the International and National Evaluators. A detailed itinerary of the Mission is shown in Appendix B. A full list of people interviewed and documents reviewed are given in Appendix C and Appendix D respectively. The conclusions and recommendations of the MTR were to focus on the current setup of the AREAN Project and its suitability of completed by its scheduled date of 29 August 2023.

8. There were limitations to this MTR process. Since this assignment has coincided with the severe global travel restrictions in place due to the COVID-19 pandemic, this MTR has mainly relied on field information gathered by the National MTR Consultant based in Niue with information from selected interviewees on AREAN activities. Some stakeholders with government agencies, government companies and the PMU were interviewed by both the International and National MTR consultants. Notwithstanding, the limitation of this MTR was the inability of the International MTR Consultant to have face-to-face interviews with all key stakeholders. The International MTR Consultant was not able to take the opportunity to get to know the stakeholders better. Actual visits to the offices of the stakeholders and the PMU by the International MTR Consultant are usually an opportunity for the stakeholders and the PMU to make a 2-3 hour presentation followed by question-and-answer period. This has many intangible benefits including the collection of information not documented. With virtual visits on Zoom, the opportunity to make these 2-3 hour presentations and conduct a question-and-answer period is limited. By this limitation to the International MTR Consultant, he has limited exposure to the stakeholder teams, and as such, the MTR to a large extent is dependent on the information gathered by the National MTR Consultant and the documentation from progress reports and other reports. Regardless, both the International and National MTR Consultants have made every effort to understand and present a fair and a well-balanced assessment of the Project. Any gross misrepresentation of the Project has been resolved through discussions with the Project team.

1.3 Structure of the MTR Report

9. This MTR report is presented as follows:

- An overview of AREAN Project activities from a development context from its commencement of operations in October 2019 to the present;
- An assessment of Project strategy and design;
- An assessment of Project progress towards results;
- An assessment of Project implementation and adaptive management;
- Assessment of sustainability of Project outcomes; and
- Conclusions and recommendations.

2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

2.1 Development Context

10. Niue is a coral island with a land mass of 260 km^2 located in the South Pacific in the middle of a triangle formed by Tonga, Samoa, and the Cook Islands. The island consists of steep limestone cliffs along the coast with a central plateau rising to about 60 meters above sea level. The island has a tropical climate, with most rainfall occurring between November and April.

11. As one of the least populated countries in the world with a population of 1,600 people (2018 census) and due to its geographic isolation, Niue has very limited natural and human resources, making the country highly dependent on foreign aid and international support. With freight costs to transport goods and services being particularly high, Niue is far from being economically self-sufficient and strongly depends on financial support from international developing partners. Niue gained a status of self-government in free association with New Zealand in 1974. New Zealand maintains a statutory obligation to provide financial support to Niue. With a 2016 GDP of US$24.938 million (equivalent to a 2016 GDP per capita of US$15,586), New Zealand's financial support is about 70% of Niue's GDP. With Niue not accredited to apply for loans (such as with the ADB or the World Bank), it is dependent on grant financial support.

12. Due to high freight costs, energy imports have an impact on as much as 15.3% of Niue's GDP. With a very small population and a very low population density, there is an extremely high cost per capita of building, operating, and maintaining the infrastructure necessary to deliver public services (roads, electricity distribution network, water distribution system, public illumination, waste collection and disposal systems). Niue is constantly exposed to the risk of not receiving fuel supplies on time, especially during cyclone season, which lasts from November through April with GoN plans to increase its fuel supply security to 60 days with regular shipments delivered every 28 days.

13. Though Niue has achieved 100% electricity penetration (with all 14 villages spread being grid connected) and is a net sink for GHG emissions due to its large forest area (Niue annually removes 139,000 tCO_{2eq} versus ~5,000 tCO_{2eq} emitted), the major issue for Niue's energy sector is that 99% of energy demand is met through imported fossil fuels primarily used for transportation (land, air, and marine), electricity generation, and cooking. Only 1% is met domestically through solar energy for water heaters and electricity generation, and biomass for cooking.

14. On October 2016, Niue submitted to the UNFCCC its Intended Nationally Determined Contributions (INDC), and on the same date the Government of Niue (GoN) also ratified the Paris Agreement essentially turning its INDC into an NDC. The NDC is based on the Niue Strategic Energy Road Map for 2015-2025 (NiSERM), which contains all its energy targets set or reformulated. The main goal of NiSERM is to generate 80% of its electricity needs from renewable energy (RE) by 2025 as a contribution to the world's efforts of reducing the total GHG emissions. Niue, however, does not have the financial means or the technical expertise to achieve this goal on its own without external support. The GoN requested financial aid and technical assistance to meet its NiSERM3 goal through the UNDP-GEF Project: *Accelerating Renewable Energy and Energy Efficiency Applications in Niue* (referred to as the AREAN Project or the Project).

2.2 Problems that the AREAN Project Seeks to Address

15. The achievement of the 80% electricity from RE is prevented by grid stability issues that have affected the grid since the early stages of solar PV implementation that have not yet been resolved. Stakeholder consultations have revealed that these issues have led to a general lack of confidence in solar PV amongst Niueans. This is one of the barriers that hinder the achievement of the green growth targets set in the NiSERM. Other barriers include:

- inadequate and not fully enforced policies, regulations and standards related to sustainable energy and Low Carbon Development;
- non-enforcement of plans, policies, regulations, and implementation of programs on the application of climate resilient and low carbon technologies in the end-use sectors;
- limited availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors;
- climate resilient and low carbon techniques and practices are not adopted and implemented in the energy supply and energy end use sectors;
- low level of confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors; and
- low level of awareness and poor attitude towards climate resilient and low carbon technologies in the energy end use sectors.

16. Besides providing global environment benefits and making Niue more energy independent, a significant advantage of achieving the RE and EE targets established in the NiSERM3 would be the possibility of freeing a significant portion of the public finances and direct the funds toward activities to promote social and economic advancements.

2.3 AREAN Project Description and Strategy

17. This GEF-6 Project was aiming to "enable and facilitate the achievement of low carbon energy access, sustainable energy, and green growth targets of Niue" as stated in the NiSERM. To this end, the Project is supposed to:

- improve policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors;
- facilitate effective enforcement of plans, policies and regulations, and implementation of programs and projects on the application of climate resilient and low carbon technologies in the end-use sectors;
- increase availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors;
- adopt and implement climate resilient and low carbon techniques and practices in the energy supply and energy end-use sectors;
- enhance confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors.

The key targets of the Project are reduction in the overall national energy utilization intensity of 0.089 toe/1,000 US$GDP, cumulative GHG emission reductions from fossil fuel utilization of 9,242 tons CO_2, cumulative fossil fuel savings (due to sustainable energy and low carbon interventions

implemented) of 3,281 toe, 73% RE electricity production, and 8 new jobs created in the application of sustainable energy and low carbon technologies and techniques in the energy supply and energy end-use sectors in Niue. The ProDoc was signed in July 2019 and Inception Workshop took place in October 2019. The Project has a duration of 48 months until October 2023.

2.4 AREAN Project Implementation Arrangements

18. The executing partner for the AREAN Project is the Department of Utilities under the Ministry of Infrastructure (DoU-MoI). With the GoN assigning the challenges of climate change in the region to this agency, DoU is responsible for overall implementation of the Project, including the central coordination of Project activities through a Project Management Unit (PMU). AREAN is being managed by a DoU Project Manager, a Project Technical Officer, a Project Finance and Administrative Officer, a Project Communication Officer, and a Chief Technical Advisor (CTA).

19. The AREAN Project Board (PB) is called "Technical Working Group" (TWG) that serves to take corrective action as needed to ensure the Project achieves the desired results. The TWG is to hold Project reviews to assess the performance of the Project and appraise the Annual Work Plan (AWP) for the following year. In the Project's final year, the TWG is to hold an end-of-project (EOP) review to capture lessons learned and discuss opportunities for scaling up and to highlight Project results and lessons learned with relevant audiences. This meeting is also to discuss the findings outlined in the Project terminal evaluation report and the management response.

20. The AREAN Project attempts to build on ongoing stakeholder efforts to overcome barriers to the mainstreaming of low carbon and emission technologies for Niue's energy sector. This includes the NiSERM for 2015-2025, which contains reformulated energy targets and referred to Para 14. AREAN is to work towards the main NiSERM goal of generating 80% of its electricity needs from RE sources by 2025.

2.5 AREAN Project Timing and Milestones

21. The AREAN Project was designed as a 4-year project that commenced on 1 October 2019 scheduled to end on 30 September 2023. Progress up to 31 December 2022 has been unsatisfactory as further detailed in Section 3.2. A summary of significant events for the first 39 months of the AREAN Project include:

- the Government of Niue signing the AREAN ProDoc on 1 October 2019;
- the Inception Workshop was conducted 31 October 2019;
- Project Manager recruited on 9 March 2020;
- the 2020 AWP was presented to Cabinet in early April 2020;
- travel restrictions imposed on Niue starting in March 2020 with the cancellation of travel by UNDP[3] and the Environmental and Social Management Plan (ESMP) consultant, forcing activities to be done virtually;
- delays in delivering GEF funds to GoN in Q2 and Q4 in 2020;
- Admin and Finance Officer recruited on 7 September 2020;

[3] UNDP MCO staff, Mr. Jeffery Leung Wai, and Mr. Ioane Iosefo were scheduled to travel to Niue from the 9-13 March 2020.

- NPC commissioned a technical feasibility study in September 2020 to properly identify causes and issues associated with problems of grid instability resulting from the integration of RE and EE technology into the national grid. The study has not been completed with the findings and recommendations of the feasibility study to inform the basis of discussion for assistance by the AREAN Project;
- Assessment completed in September 2020 in a home that has been on full solar power since 2001;
- An online photo competition was conducted in early December 2020 to raise public awareness of the Project;
- Official launching of AREAN Project activities in December 2020 including selfie competitions and merchandise use for Project support of community initiatives;
- Establishment of the Independent Power Review Committee in August 2021 to undertake a comprehensive overview of the Niue Power Corporation in its entirety and recommend areas of critical reform and restructure;
- Cabinet endorses the proposed Electric Power Supply and Energy Amendment Bill 2021 (EPSEA) for progression through the Niue Legislative Assembly enactment process in 4Q 2021;
- Waste management plans for RE and EE applications (batteries, PV panels, incandescent light bulbs) completed by the Department of Environment in September 2021. This also included environment department waste management plans with AREAN assistance to address final plan and resource recycling center plans;
- Report on making transformers more efficient was completed in September 2021;
- Ministry of Infrastructure convened with the AREAN PMU in September 2021 with concluding remarks from the Minister to urge the Ministry to push ahead with critical areas of need and ensure that partnerships created are utilized fully, especially with funds available under the AREAN project;
- In March 2022, the Project Manager resigned;
- In October 2022, a new Project Manager and Project Finance and Administration Officer were hired;
- In 2022, the Finance and Administration Officer resigned, and the position of National Project Director changed from the Director General of DoU-MoI to Director of NPC.

22. Though the CEO Endorsement document was signed on 11 July 2019, the ProDoc was not signed until 28 August 2019. Furthermore, the AREAN Project did not effectively commence until Q4 of 2020, a time when most of the PMU positions were staffed, and effective outreach to all stakeholders was established (with COVID-19 restrictions not being relaxed until 3Q 2022). At the time of writing this MTR report, there is just under 6 months of time remaining to complete all AREAN activities. Details of the challenges that remain to achieve all AREAN targets and other progress-related issues are provided in Section 3.2 of this report.

2.6 Main Stakeholders

23. To achieve the specific AREAN Project objective of "enabling and facilitating the achievement of low carbon energy access, sustainable energy, and green growth targets of Niue", the AREAN Project needed to engage a wide range of stakeholders in Niue (as specified in the ProDoc), that included:

- *Department of Utilities – Ministry of Infrastructure (DoU-MoI)* is the government entity that has control of the energy-related state-owned enterprises and designated as the implementing

partner for the AREAN Project, responsible for implementation of Niue Sustainable Energy Road Map of October 2016. DoU was to assume a leadership role during Project implementation providing guidance and supervision, cooperating closely with the PMU throughout the entire duration of the Project. In addition, DoU was to be responsible for communication and coordination with the National GEF OFP office and UNDP and provide liaison with villages during demo projects implementation;

- *The Project Management and Coordination Unit (PMCU)* is a department under the Premier's office that provides centralized project management services, coordinates project management activities, and facilitates stakeholder relationships. It was setup by the previous government administration to manage government projects that the departments were not able to fully complete or report on, and to ensure that the GoN are meeting their obligations with the donors. All this is to be done on top of their core functions;
- *Niue Power Corporation (NPC)* is the state-owned enterprise (SOE) that manages power generation and distribution assets in Niue. NPC's role is critical in the implementation of AREAN's activities related to grid stabilization, installation of RE power generation systems and ancillary equipment. NPC personnel are to be beneficiaries of AREAN and other donor-sponsored several training programs. With NPC formerly managed by the Department of Public Works, NPC changed management to a private company (NPNC or Numismatic and Coins). After 3 years under NPNC management up to 2020, NPC changed back to government management primarily due to finance issues;
- *Department of Transportation – Ministry of Infrastructure (DoT-MoI)* is involved in adoption programmes for electric vehicles (EVs) and hybrid cars as well as streetlighting which are to be converted to solar-powered LEDs. Similarly, DoT-MoI are to be beneficiaries of AREAN and other donor-sponsored several training programs;
- *Treasury Department* is the entity responsible for approval and enforcement of fiscal and financial incentives supporting RE and EE technologies. This includes electricity price revision and extension of energy subsidies;
- *Crown Law* is responsible for the provision of legal comments on project agreements and documents for projects;
- *Niue Bulk Fuel (NBF)* is an SOE that manages the imports and distribution of fossil fuels into Niue. The operation of NBF will be highly affected with anticipated decreases in diesel imports resulting from a shift towards RE/EE technologies. NBF personnel were to be the beneficiaries of AREAN and other donor-sponsored several training programs;
- *Niue Chamber of Commerce* has expressed its intention and willingness to partner with AREAN to support the creation of a local market for RE and EE technologies and services, notably in sponsoring and organizing programs to train repair and service providers in new technologies adopted under AREAN (such as EVs and hybrid cars), in the supply of expertise for financial and fiscal incentives to stimulate the local RE/EE market, and in promoting awareness about RE/EE technologies to the general public;
- *Niue Development Bank (NDB) and Kiwibank* the Alofi branch of the Kiwibank two financial institutions who are to be engaged with several awareness raising and information dissemination activities related to RE/EE technologies during the AREAN, and the supply of expertise for the establishment of financial and fiscal incentives aimed at creating an RE/EE market in Niue. These banks are currently managing an IUCN financing scheme promoting high energy efficiency household appliances;
- GoN Ministries and Departments (such as the Ministry of Natural Resources; Department of Agriculture, Fisheries and Forestry; Ministry of Social Services; Department of Statistics;

Department of Water Resources; Niue Met Services) who are to be involved with AREAN implementation activities and demonstration projects. Their services, expertise and database of information was to be especially useful for success of capacity building, and awareness raising around RE and EE technologies. Staff members are to be involved in several training initiatives;

- Community Leaders are represented on 14 village councils who are to be consulted for the planning, replication, and selection of the location of some of the LC technology demos;
- Non-Governmental Organizations (NGOs) are to involve women's groups and all organizations related to the preservation of Niue's heritage;
- The entire population of Niue are to be involved in awareness activities organized and implemented under AREAN as well as beneficiaries for a more efficient and reliable electricity grid and a greener and more sustainable environment.

3. FINDINGS

3.1 Project Strategy

24. The AREAN Project is a GEF-6 project that builds on ongoing stakeholder efforts to overcome barriers to the mainstreaming of low carbon and emission technologies for Niue's energy sector in 2019 covered in Para 17. The barriers hindering the achievement of the green growth targets set in the NiSERM were identified by Niuean stakeholders in a Project Results Framework (PRF) Workshop, held in Alofi, Niue on 13-14 February 2018:

- lack of policies for enabling actions that would motivate interest in developing and sustaining the country's energy sector;
- the weak institutional capacity leading to a lack of government energy planners and energy specialists on RE, non-RE and EE technologies that can ensure donor-funded energy projects are appropriate for the country;
- a lack of financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors;
- grid instability when more RE-based systems are integrated with the existing power grid;
- general lack of confidence in RE due to previous RE project failures in Niue, and the current grid instability issues that has resulted in delays in installing some of the grid-connected solar PV systems. This makes it difficult to generate enthusiasm for new RE efforts at either the public or private level.

25. The AREAN Project's objective is to "enable Niue to achieve its low carbon and sustainable energy, and green growth targets" that are based on Niue's NDC, which in turn was based on NiSERM for 2015-2025. Though the main target set by Niue is the generation of 80% of its electricity needs from renewable energy sources by 2025, very little has been done to date to implement the NiSERM recommendations. This is further elaborated in Paras 33-36.

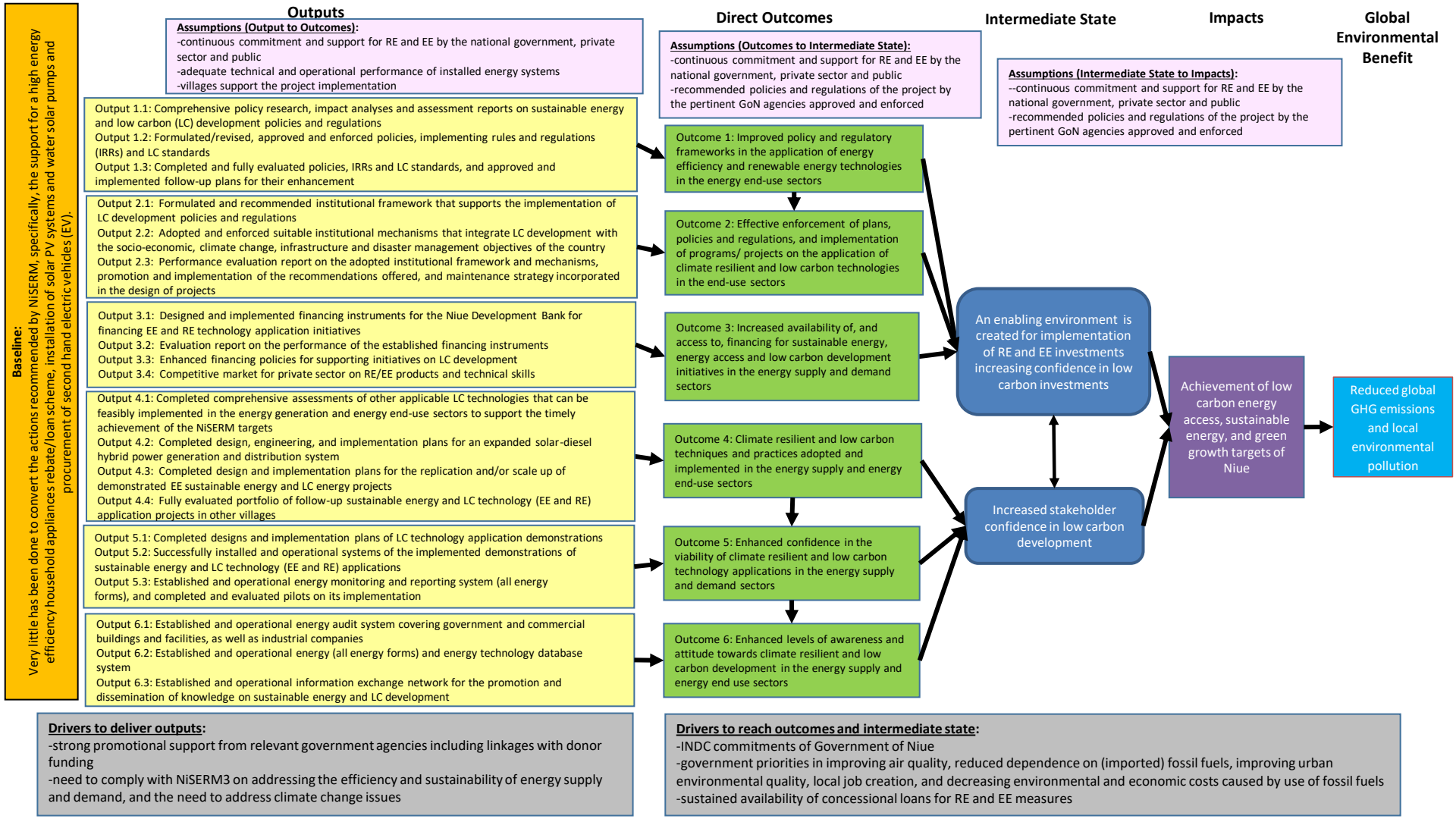
3.1.1 Original Project Design

26. The AREAN Project is designed based on a barrier removal strategy. The strategy calls for the design of ad-hoc activities that build on, complement, supplement, and augment the baseline projects to address the identified barriers. A barrier removal approach is the best available strategy because of its sustainability; removing the root, intermediate and immediate causes of the core problem of Niue's energy access; and with sustainable energy and green growth targets not being fully achieved in a BAU scenario, the Project will enable the country to become independent in pursuing its energy targets in the future.

27. The ProDoc was signed on 29 August 2019 with an intended duration of 48 months (until September 2023) and with an Inception Workshop taking place in October 2019. The strategy is illustrated in the Theory of Change (ToC) diagram on Figure 1. The ToC diagram shows the immediate causes that hinder GoN's efforts to achieve its energy roadmap targets and the consequence of not removing them. Implementation of AREAN activities are designed to remove the barriers and enable the realization that contribute to achievement of the Project objective and the following outcomes:

- Outcome 1: Improved policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors;

Figure 1: AREAN Theory of Change



- Outcome 2: Effective enforcement of plans, policies and regulations, and implementation of programs/projects on the application of climate resilient and low carbon technologies in the end-use sectors;
- Outcome 3: Increased availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors;
- Outcome 4: Climate resilient and low carbon techniques and practices adopted and implemented in the energy supply and energy end-use sectors;
- Outcome 5: Enhanced confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors;
- Outcome 6: Enhanced levels of awareness and attitude towards climate resilient and low carbon development in the energy supply and energy end use sectors.

28. Underlying assumptions of each baseline activity towards their contribution to achieving the overall Project results was covered in the PRF. This includes assumptions such as the sustained commitment of national authorities and sector entities, adequate technical and operational performance of installed energy systems, and villages support the project implementation. There are also 8 Project risks in the ProDoc (too many risks for the PMU to monitor), which should have listed less than 6 risks in the UNDP risk log.

29. However, considering the unsatisfactory progress of AREAN, the primary issue for the MTR in the context of the AREAN design is the issue of re-alignment of the AREAN activities with GoN's national priorities of NiSERM3. With the AREAN Project design not having been reviewed since 2019, this MTR is obligated to review the AREAN design to see if it makes sense to continue with the current design or to revise it. With 9,242 tonnes CO_{2eq}/yr of cumulative emission reductions targeted by the EOP, the issue with this MTR is whether there is sufficient time remaining on the AREAN Project to expend all the AREAN funds for this purpose.

30. A review of the AREAN ProDoc also reveals that gender issues were considered in this Project, including all AREAN activities to be designed and implemented in a gender inclusive manner; this will continue to guarantee the equal opportunity environment established in Niue. Despite positive gender issues in Niue (supported by evidence of no differential treatment between men and women in Niuean Society, and some numerical evidence that within the GoN, 5 out of 11 managerial positions were held by women), gender gaps still exist in Niuean society as evidenced in the footnotes[4,5,6]. More work is needed to provide insights into the gender issues (see Recommendation #7, Para 84).

[4] Based on 2017 data from the Niue Enhanced Nationally Determined Contribution 2022 Report, 51.7% of the total population of 1,719 are female. There is a "lack of reliable data and gender centric research are limitations to understanding the extent of gender inequality…….. Gender-based violence is widely prevalent in Niue. Legislations must be strengthened to promote women's rights and gender equality."

[5] "Parity in educational attainment has been reached between girls and boys at the primary and secondary level, with girls outperforming boys at the secondary level. Women are strongly represented in decision-making bodies and comprise a significant proportion of senior public service jobs. However, only 3 women are represented out of the 20 Members of Parliament and only one member of the four-person Cabinet is female." (Source: https://www.dfat.gov.au/sites/default/files/niue-development-program-investment-design-2021-2025.pdf)

[6] While no time-use surveys have been undertaken for Niue, anecdotal reports highlight that in the majority of families, women spend more time than men caring for children, the sick and the elderly, and that they also spend more hours cooking and cleaning than men do. This is the case whether or not both partners work outside the home or in unpaid agricultural work. Women have less free time to enjoy leisure activities, engage in community and national decision-making processes and look after their own health. A stocktake of the government's gender mainstreaming capacity in 2015 found that while the

3.1.2 Analysis of Project Results Framework

31. The AREAN Project design and formulation is rated as **highly satisfactory** with the PRF meeting "SMART" criteria[7] that is effective in monitoring project progress with no specific comments on the indicators. However, the PRF is gender-blind with not one single gender-disaggregated indicator. There is also a need for a revised AREAN Project approach that aligns with updated GoN's national priorities of NiSERM that meets the overall cumulative GHG emission target of 9,242 tCO_{2eq}, rationalized in Sections 3.2-3.4 with recommendations provided from Paras 78-84.

3.2 Progress towards Results

3.2.1 Progress towards Outcome Analysis

32. Progress towards results is provided on Table 1 against the EOP targets in the AREAN PRF. Comments on some of the ratings are provided in the following paragraphs. For Table 1, the "achievement rating" is color-coded according to the following colour coding scheme:

Green: Completed, indicator shows successful achievements	Yellow: Indicator shows expected completion by the EOP	Red: Indicator shows poor achievement – unlikely to be completed by project closure

Project goal and objective level targets:

33. With regards to the mid-term targets of the Project goal of "0.095 toe/1,000 US$ GDP reduction in the overall national energy utilization intensity" and "4,108 tCO_{2eq} cumulative direct GHG emissions reduced due to the Project", the Project has made no progress due to the absence of deployment of low carbon technologies using GEF funds. There was also no progress made for the mid-term targets of the Project objective of "1,361 toe cumulative fossil fuel savings due to sustainable energy and low carbon interventions implemented", "64% RE electricity production" and "3 new jobs created in the application of sustainable energy and LC technologies and techniques in the energy supply and energy end-use sectors in Niue". At the time of writing of this MTR, the Project has experienced delays making implementation of AREAN activities very difficult.

government had a draft national policy on gender equality, there was a lack of awareness on gender quality challenges. In addition, there were limited resources and technical capacity to address these challenges. Less than 1% of the national budget allocated is to the Department of Women. There is high participation of women in the non-agricultural sector (46%) ……. However, in the public service, women are under-represented in senior management positions. Strong gender stereotypes as to what constitutes women's and men's roles have created an inequitable participation in the labour force and food production. Niue has updated its school curriculum to address gender stereotypes. Girls in Niue tend to be slightly ahead of boys in educational achievement. When it comes to health care, there are free reproductive health services, although accessibility remains a challenge, especially for young people. The status of maternal health is noted to be relatively good with no cases of women dying in childbirth since the early 1980s. This has been attributed to the high standard of health services provided for mothers in Niue through maternal and community awareness. Niue has a health referral system to New Zealand. While the prevalence of domestic violence has not been surveyed, data from the police and health services indicate that both physical and psychological abuse are present in Niue. Anecdotal evidence suggests that the community response to violence tends to be managed within the village or extended family network.
(Source: https://pacificwomen.org/wp-content/uploads/2019/01/Niue-Activity-Summary_Overview-of-all-activities_Aug-2020.pdf)

[7] Specific, Measurable, Attainable, Relevant, Time-bound

Table 1: Progress Towards the AREAN PRF (from the August 2019 ProDoc)

Project Strategy	Indicator	Baseline Level	Mid-Term Target	End-of-Project Target	Midterm Level and Assessment	Achieve-ment Rating	Justification for Rating
Project Goal: Improved energy consumption index and reduced annual growth rate of GHG emissions in the country's energy supply and energy end-use sectors.	Reduction in the overall national energy utilization intensity (toe/1,000 US$ GDP)	0.109	0.095	0.089	0.109		See Paras 33-36
	Cumulative GHG emission reduction from fossil fuel utilization, tons CO2	0	4,108	9,242	0		
Project Objective: Enabling the achievement of low carbon energy access, sustainable energy, and green growth targets of Niue	Cumulative fossil fuel savings due to sustainable energy and low carbon interventions implemented, toe	0	1,361	3,281	0		
	% RE electricity production	1.8%	64%	73%	1.8%		
	No. of new jobs created in the application of sustainable energy and LC technologies and techniques in the energy supply and energy end-use sectors in Niue	0	3	8	0		
Outcome 1: Improved policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors.	No. of approved and enforced RE and EC&EE policies, and associated guidance and implementing rules and regulations	0	2	2	2		See Paras 37-38
	No. of formulated and approved policies and regulations incorporated in the country's Energy Act	0	2	2	2		
Outcome 2: Effective enforcement of plans, policies and regulations, and implementation of programs/ projects on the application of climate resilient and low carbon technologies in the end-use sectors	No. of sectoral integrated development plans that are implemented and managed through the established and adopted integrated institutional mechanisms	0	1	2	2		See Para 40
	No. of low carbon development initiatives facilitated by adopted and enforced institutional arrangements mentioned in Indicator 1	0	2	4	2		
Outcome 3: Increased availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors	No. of developed and recommended financing schemes/mechanisms with Niue Development Bank for supporting climate resilient and low carbon development initiatives in the country	0	1	2	0		See Para 42
	No. of small-scale EE projects and RE technology projects financed either through the adopted financing scheme; or by private sector investment	0	2	6	0		

Project Strategy	Indicator	Baseline Level	Mid-Term Target	End-of-Project Target	Midterm Level and Assessment	Achieve-ment Rating	Justification for Rating
	No. of recommended finance/fiscal policies for supporting initiatives on LC development	0	2	2	0		
Outcome 4.1: Climate resilient and low carbon techniques and practices adopted and implemented in the energy supply and energy end-use sectors	No. of completed feasibility assessments conducted for planned energy-integrated socio-economic development activities that feature RE and EE technology applications	0	2	4	1		See Para 44
Outcome 4.2: Enhanced confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors	Cumulative amount of energy savings from the successfully installed and operational demonstrations (including replications) of sustainable energy and low carbon technology applications, toe	0	0	368	0		See Para 46
	No. of RE and EE technologies application projects designed and financed for implementation as influenced by the results and outcomes of the demonstrations	0	1	5	0		
Outcome 5: Enhanced levels of awareness and attitude towards climate resilient and low carbon development in the energy supply and energy end use sectors	Incremental no. of energy consumers (e.g., households) that will utilize EE appliances and RE-based energy generating and consuming equipment acquired through AREAN initiatives	0	40	160	0		See Para 48
	No. of local firms that can capably provide technical, engineering and maintenance services for sustainable energy and low carbon technology application projects	0	1	3	0		

34. With regards to the Project's objective to "enable Niue to achieve its low carbon and sustainable energy, and green growth targets" that are based on Niue's NDC (and the main NiSERM 2015-2025 target of 80% generation of its electricity needs from renewable energy sources by 2025), very little has been done to date to implement the NiSERM recommendations that included:

- supply and installation of a 90 kWp solar PV system in 2016 funded through European Development Fund-10;
- 200 kWp of solar PV panels that were co-financed by Japan (for supply) and by New Zealand (for installation);
- the establishment of an upscaled US$150,000 high energy efficiency household appliances rebate scheme for 4-star rating appliances (which includes freezers, refrigerators and washing machines)[8]. To date, the scheme has not disbursed its available budget yet (details in Para 42);
- two water solar pumps are to be purchased by the Project to reduce the electricity demand. Specifications for these pumps are still being reviewed for power capacity to supply the required water volumes; and
- one second hand electric vehicle (EV) and one hybrid vehicle have been purchased by the AREAN Project for demonstration.

35. With the supply of the 200 kWp PV panels donated by Japan and the installation costs are borne by New Zealand, Niue would have reached a solar PV generation capacity of 543 kWp. However, installation awaits resolution of the grid instability issues as well as issues with batteries and inverters. Under a business-as-usual (BAU) scenario, Niue will be unable to achieve its AREAN target of 73% renewable energy by the EOP date of 30 September 2023.

36. In 2021, there were reports that 38% of the power was generated by solar, a figure that does not correlate with annual diesel payments, where diesel savings were expected. There were several possible reasons for this including the diesel generator sets using up more diesel than expected and the manual recording of fuel may not have been done correctly. A contractor has been recruited to investigate the situation and provide a report. With the 30 September 2023 EOP date of AREAN, there is a substantial risk that none of these targets will be achieved. The rating for objective achievements is ***moderately unsatisfactory***.

Outcome 1:

37. Work on legislation on the EPSEA 2021 was led by a Review Committee and was completed in early 2021. The effort was a revision of the 1960 Electric Power Supply Act (EPSA). Clauses in the EPSEA 2021 were made for independent power producers and private sector to participate in the energy sector, and to provide energy prices and regulations on service quality. EPSEA 2021 also includes establishing and implementing sectoral codes of conduct, guidelines, and standards of operations for the energy industry. EPSEA 2021 has been endorsed by Cabinet and tabled in the Assembly in October 2021.

38. For other Outcome 1 indicators, the following has been achieved:

[8] This was originally a US$80,000 IUCN scheme established in early 2017 that was applied to only a few appliances. The scheme was so popular that it was to be continued under the AREAN Project.

- there have been updated standards and legislations set up with the 1960 EPSA which includes renewable energy and energy efficiency. However, clarifications are needed for where NBF fits in the legislation and encouraging people to use energy efficient appliances;
- regulations for the governance of changes to EPSEA 2021 have been adopted. This includes legislation on who does the inspections of homes for the appropriate types of technologies, the frequencies of those inspections, incorporating waste components, applying tariffs and green taxes;
- the Department of Environment addressed a waste management plan with the assistance of the Project for RE projects including batteries, PV panels, and LEDs. Project assistance was provided to the Director of Environment who is currently awaiting final resource recycling centre plans;
- preparation of integrated development plans and integrated energy development plans for sectors of the national economy involving energy and environmental impacts has been conducted;
- establishing and implementing appropriate energy prices and service quality regulations is ongoing but not yet completed due to difficulties procuring an international consultant. This activity has been deferred to Q1 2023;
- evaluated policies, implementing rules and regulations (IRRs) and low carbon standards;
- identified a need for policies to monitor and manage increase in power load due to the increase of AC use;
- detailed assessment of the capacity needs of GoN personnel has been done to design training programs, and to train GoN personnel to carry out energy planning and management of technology applications. However, with much time expended on consolidating departments into ministries, designing training programs for key personnel is yet to complete with many still confused as to their roles. PMCU's role is to ensure that the GoN are meeting their obligations with the donors and that legislation is done to easily ensure changes.

39. Overall, Outcome 1 is rated ***satisfactory*** with the establishment of the EPSEA 2021.

Outcome 2 targets:

40. In support of Outcome 2 targets:

- a final report by Hekau Attorney-At-Law on current institutional arrangements and assessment of stakeholder roles and gaps to fill was endorsed by Cabinet in 2021;
- EPSEA 2021 has provisions for implementing LCD policies and regulations under “The Department” under clauses 20 to 26 and for “Niue Energy Authority” under clauses 27 to 32;
- more staff are needed at Niue Power to deal with the ongoing maintenance issues. With training programs setup for GoN personnel, the training was to cover coordination mechanisms between NPC and GoN in electricity generation and distribution, as well as the maintenance strategy for RE/EE designs. However, the programs are awaiting availability of trainers and procurement of equipment;
- developing and applying procedures or guidelines on how to integrate LCDs with energy, climate change and other relevant objectives of Niue, has not been completed due to due to staff turnover. This activity has been moved to Q1 2023;

- some low carbon initiatives have been implemented including the Dark Skies Policy[9]; the replacement of street-lights with energy saving LEDs under the Outdoor Lighting Plan and Policy Statement; and the Tavili ke Moui Financing Scheme aimed at EE appliances (see Para 42);
- for Phase 2 of the restructuring of NPC, an independent review committee was appointed in 2021[10] where coordination mechanisms were established between 2 SOEs (NPC and NBF) in the energy sector for an appropriate corporate governance structure. A technical unit now manages the collection, management, and reporting of data, correlating the information from diesel and petrol fuel consumption and renewable energy[11]. The goal is for NPC to transition to be an energy authority run by a Board that will focus only on NPC and not on other sectors.

41. Overall, Outcome 2 is rated ***moderately satisfactory*** with the restructured plans, policies, and regulations to provide better conditions to meet the 80% renewable supply by 2030 but with a shortage of NPC staff to deal with the ongoing maintenance issues.

Outcome 3 targets:

42. In support of Outcome 3 targets:

- there has been the design of the Tavili ke Moui Support scheme, a US$150,000 financing instrument that provides rebates for the purchase of high energy efficiency household appliances with a 4-star rating (including freezers, refrigerators and washing machines). Though the scheme received final approval from Cabinet in late 2021 with a flyer developed by the Chamber Office, the scheme has not been mobilized pending the submission of additionality criteria of the rebates that meets UNDP and GEF criteria;
- outreach and technical assistance have been conducted to applicants of the finance scheme in early 2022;
- a review of Niue's financing policies on sustainable energy and low carbon development has been completed in mid-2021;
- training programs were held for GoN personnel on sustainable energy and LCD financing policymaking, and for service providers to improve technical skills in 2021;
- public awareness information was drafted by Chamber of Commerce office and disseminated on financial and fiscal incentives to encourage RE and EE initiatives;
- a financial scheme of US$150,000 was ready for rollout in 2022 using the services at the Niue Development Bank to subsidize the purchase of electrical appliances with 4-star rating, facilitating a behavioral change and incentive for all Niueans. UNDP, however, requested changes to be made to ensure that what is proposed complies with GEF rules and UNDP policy requirements on the use of grant instruments[12]. A meeting with the UNDP RTA has led the PMCU requesting for adjustments to be made to allow the scheme to proceed. The financial scheme hence was still on hold at the time of the MTR.

[9] The Policy, endorsed by GoN, specifies that lighting is focused on public illumination and does not affect the flora and fauna.
[10] The committee consists of Mr. Fapoi Akesi, Mr. Desmond Hipa, Mr. Billy Tukutama and a person from Bulk Fuel.
[11] This technical unit is managed by Mr. Scan Mitiepo.
[12] Grant assistance needs to comply with UNDP and GEF guidelines which stipulates that the grant amounts need to be justified by statements of additionality.

43. Overall, Outcome 3 is rated ***moderately satisfactory*** with delays in the financial scheme of US$150,000 in 2022 with the Niue Development Bank ready to provide rebates for the purchase of electrical appliances.

Outcome 4.1 targets:

44. In support of Outcome 4.1 targets:

- an assessment of households that currently have solar PV systems installed has been completed. This included an evaluation of optimal solar PV power generation inputs and a comprehensive engineering design for expanded solar-diesel hybrid power generation and distribution;
- solar PV was installed in 2018 by a company that has yet to submit its final report. A transformer system assessment was completed in 2019 through a report supporting procurement of transformers for the national grid, which indicated the transformers purchased from New Zealand were compatible with the existing system to ensure power supply for the island. However, the transformers have not been installed pending a grid stability study, commissioned in September 2020, which has still not been completed for the island (the resignation of the PM in March 2022 created additional delays);
- a request has been made to the AREAN team for the upgrade of 4 solar installation sites (380 kWp capacity) whose kilowatt production have dropped dramatically due to faulty inverters and the age of the installations[13]. The upgrade will involve NPC replacements of faulty inverters and reconfiguring the existing installation;
- there is a proposal to use AREAN to secure a RE, grid tied solar rooftop installation for the Ministry of Utility main office that will provide 20-25 kWp of power during the day;
- the Project assisted in the evaluation of engineering design and implementation plans for RE and EE demo projects, specifically the LED streetlights and building retrofits with the Utilities team, and solar water pumps with the PTO and Water Supply team;
- an integrated RE generation forecasting tool for a supervisory control and data acquisition (SCADA) system was installed in 2021 which automates the operations of remote solar PV power systems and data collection. The forecasting tool has been demonstrated to assist NPC to distinguish between variability and uncertainty when planning and operating the grid system with 80% solar PV. The forecasting tool is supposed to reduce the uncertainty of the solar PV generation, so that its variability can be more precisely accommodated in the grid system;
- a Megger Insulation Tester has been procured for NPC to equipment to optimize the performance of power generation units at the NPC powerhouse with solar PV systems integrated into the electric grid. This equipment will assist them in their daily monitoring and maintenance of PV systems scattered around the Island;
- gaps in energy data collection were assessed in discussions with ICT Data Manager on energy data. A modified switchboard has been procured from Australia to help monitor the diesel consumption and provide useful data to NPC. However, electric data loggers are still needed on fuel tanks to record fuel going into tanks and the savings accrued to replace the current method of data collection recorded manually using a dip stick. With savings to be generated from solar PV in 2021, records somehow show GoN still paying the same amount for fuel for reasons that are unclear;

[13] These sites include the hospital (30 kWp), Niue High School (20 kWp), the airport (90 kWp) and the power station 260 kWp with 10 faulty inverters).

- different solar farms around the island have the potential to contribute to renewable energy fed into the main grid, contributing to the target of 80% power generated by RE under NISERM. Another MFAT funded project (US$5 million) is expected soon to renew the cables, which will assist in the overall generation of power in Niue;
- a fuel save controller was installed in the NPC diesel powerhouse to optimize the fuel consumption of existing diesel gensets and power generation performance by implementing combined load dispatch control capabilities with energy storage functionalities. Compensation of the varying loads will be performed with the support of the battery energy storage systems, and reactive power and voltage/frequency control. This intervention is intended to optimize the performance of the power generation units and in turn, reduce diesel fuel consumptions, with reduction of GHG emission and improvement of air quality for the NPC personnel;
- codes for safe power generation control and load dispatch were developed;
- the Project trained a pool of experts in energy development, applying new RE and EE technologies with assistance from PCREEE, electricity generation, as well as O&M for transmission and distribution[14]. However, there is a need to train for staff for installation of solar PV systems that will require expertise from abroad or staff to receive training abroad (and have a local skilled person deliver training). A GIZ development course in the Solomon Islands has been targeted to provide basic electrical training and then adding renewable technology to their skill set.

45. Overall, Outcome 4.1 is rated ***moderately unsatisfactory*** primarily due to delays in getting a grid stability study completed and delays in getting transformers installed.

Outcome 4.2 targets:

46. In support of Outcome 4.2 targets, current demo projects now under development include transformers, streetlights, electric vehicle charging stations, solar water pumps, and a demonstration building. Progress has been delayed partially due to procurement issues:

- though the Project was helpful in procuring high energy efficient transformers, many delays in their procurement from New Zealand were experienced due to COVID-19 and shipping issues, taking until May 2021 to land in Niue. However, a cherry picker is needed for the installation of transformers. With procurement taking a long time, NPC is supposed to get a new cherry picker, with currently 2 hyab trucks being operational now;
- the Project has been slow to procure specialized machinery, equipment, safety gear and specialized tools for NPC, requiring NPC and the Utilities team to ensure the machinery and equipment are compatible with the existing system. There is a limited pool of people to conduct these tasks;
- LED streetlights demo is awaiting further progress on cabinet approval and receipt of funds, and 3 quotes for the tender for installation. The demo is also delayed by the availability of the Niue Power team who are expected to do this work on top of their daily core functions, and the need for specialized machines to elevate workers to the top of the posts. In addition, most street poles need replacing as they are old and rotting;
- the Water Division of the PWD is providing specifications for the solar water pumps to be installed at the borehole;

[14] Some staff training was delivered for building capacity for health and safety, CPR, renewable energy, and data monitoring.

- building retrofits are still awaiting update from Utilities team and Passive Homes. There have been suggestions to have smaller building retrofits such as with the Department of Environment extension or the Research Innovative Lab. The demonstration building at PWD is meant to be the Energy Efficient Hub to demonstrate RE technology, improve ventilation, rely on natural lighting and 30 kW of power already generated with the current solar installed. Project personnel believe that the building retrofit can be completed on time with the right equipment. An energy audit is to be completed in June 2023;
- electric vehicles and their charging stations has not yet been prepared and are awaiting receipt of funds to establish a service agreement with shop experts to fix the cars.

47. Overall, Outcome 4.2 is rated ***moderately unsatisfactory*** with progress delayed due to procurement issues, delaying the import of materials for the Project.

Outcome 5 targets:

48. In support of Outcome 5 targets:

- draft Communication Strategy is being developed that includes an information exchange and sharing platform on sustainable energy and low carbon development. The PMU has been using a SPREP Communications Adviser as well as the Niue Chamber of Commerce office, CFI Multimedia Production and Rock Steady Enterprises to assist with this effort;
- GoN personnel were trained on conducting energy audits and managing energy databases, monitoring and reporting. Energy audit system design was based on helpful assistance from PCREEE in support of demo projects. Currently, the Project is awaiting availability of trainers;
- the PWD building is being used for the public awareness of solar PV installations, solar water pumps, and charging stations for electric vehicles;
- the Project needs more awareness activities to encourage people to choose RE and accelerate the contribution of RE to energy sector in Niue. An assessment of all the homes using solar or RE found that most have inefficient appliances and produce about 5 kW of storage when the houses require about 10 kW storage. Public awareness of the AREAN Project is overshadowed by PMCU; the AREAN Project should be visible like Niue's Ridge-to-Reef Project; and
- training to the private sector and government staff to provide technical, engineering and maintenance services for sustainable energy and low carbon technology application projects, has been suspended due to unavailability of trainers.

49. Overall, Outcome 5 is rated ***moderately unsatisfactory*** with insufficient progress to raise awareness of RE issues in Niue.

50. The achievement of all the Outcome level targets is rated as **moderately unsatisfactory** primarily due to the COVID-19 pandemic, associated delays in getting equipment and supplies and expertise to the Project site, and having insufficient awareness raised on RE issues in Niue.

3.2.2 Remaining Barriers to Achieving Project Objective

51. The remaining barriers to the full achievement of targets of the AREAN Project include:

- delays in getting expertise into the country. While restrictions from the COVID-19 pandemic have recently been cleared, the Project still has a lot of technical assistance to provide which may not be delivered within the current timeframe and Project EOP date of 1 September 2023;
- delays in getting equipment and supplies imported into Niue. The Project helped with the import of transformers into Niue. However, it took 18 months to bring them to Niue with similar delivery times expected for other equipment and supplies into Niue and likely not within the current Project EOP timeframe of 1 September 2023;
- shortages of staff to manage the Project (see Para 56);
- lack of clarity on roles and responsibilities of energy sector actors including the AREAN leadership role of PMCU resulting in a low level of AREAN ownership (see Para 56).

52. Without an extension of 12-18 months to implement the AREAN Project, many of the barriers would remain. With the granting of such a Project extension to implement remaining aspects of the Project strategy with remaining AREAN resources, there will be sufficient time to accomplish much of the proposed work including the grid stability analysis and actions to address this issue and the demonstration projects. There will be a stronger likelihood that the barriers listed in Para 51 can be lowered. Details of a new AREAN approach is provided in Paras 78 to 82.

3.2.3 Implementation of Gender Mainstreaming

53. Implementation of actions to improve gender equality and women's empowerment in the SESP (Appendix F in the ProDoc) has been weak. The Project has made efforts to involve women working in both management and technical departments of the GoN institutions who play important roles in the design, development, and implementation. This is evidenced by women being well-represented in senior management level in the public service with the Project Manager and NPD being women. However, occupational segregation between men and women persists with male dominance still being prevalent in the technical positions of the Project and in positions where the low carbon is being promoted and implemented.

54. Notwithstanding, the Project was designed to enhance women's involvement in the design implementation of CCM actions in Niue's energy end use sector. More gender work still needs to be done to address shortcomings of this gender imbalance. With no gender action plan prepared for this Project, there has been no gender disaggregated data to generate any gender insights, leaving no conclusions to be drawn about female preferences and dislikes regarding Project activities and advocacy for increased female participation. In terms of impact monitoring of gender, this Project needs to focus on possible positive (or negative) impacts that Project activities have on women (managers and beneficiaries). This is highlighted in Recommendation #7, Para 84.

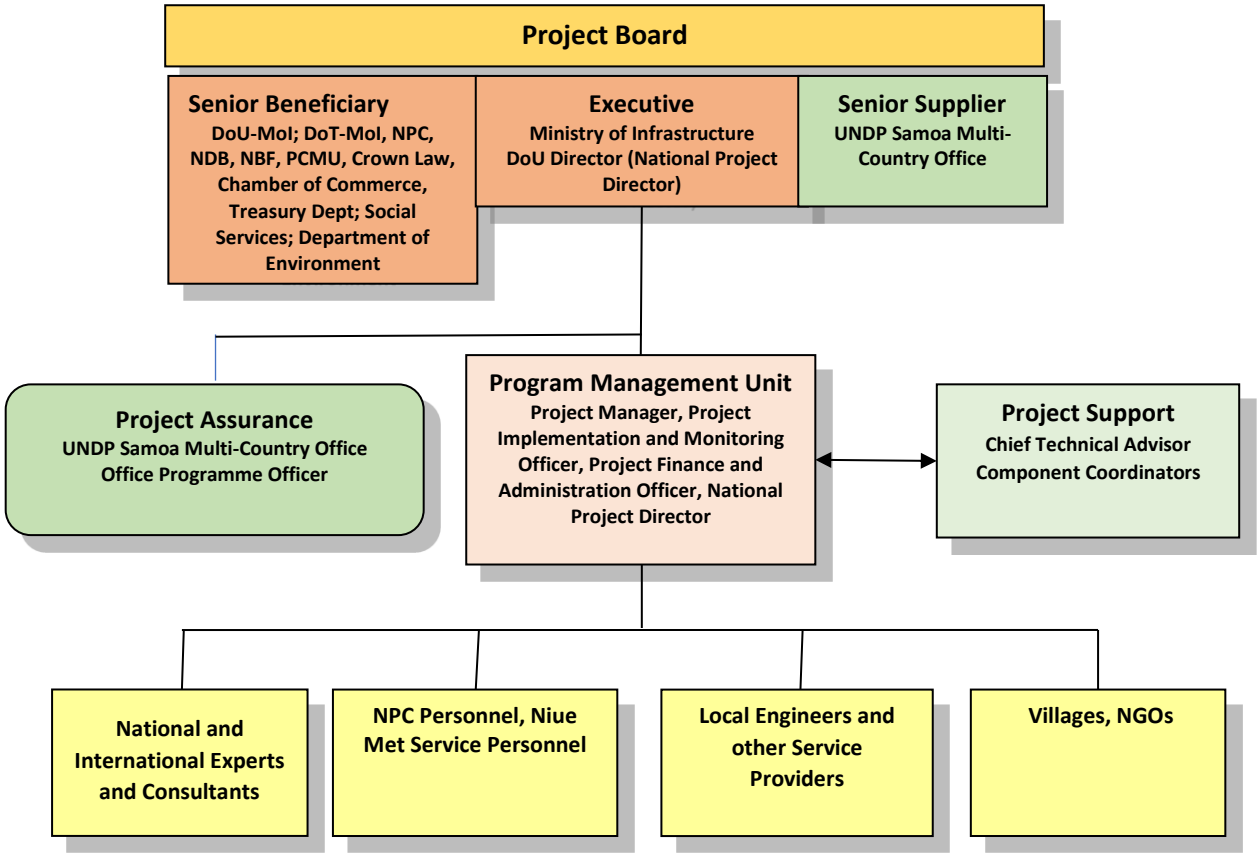
3.3 Project Implementation and Adaptive Management

3.3.1 Management Arrangements

55. The AREAN Project is under the National Implementation Modality (NIM) under an intended arrangement as depicted on Figure 2. Under NIM, UNDP has an oversight role, but Project management and implementation is the responsibility of the Implementing Partner. There is the possibility for UNDP to provide support services to NIM such as support to procurement or payments, which are specified, quantified and costed via a Letter of Agreement (LoA) signed between UNDP and the Implementing Partner. An LoA for limited UNDP support services to the Project was put in

place for AREAN. The Implementing Partner, DoU-MoI, has worked closely with other relevant stakeholders, especially the PMCU, a department under the Premier's office who provide centralized project management services, coordinate project activities, and facilitate stakeholder relationships. The DoU-MoI in cooperation with the PMCU have established a Project Management Unit (PMU) for the overall coordination and resource management of the AREAN Project. The PMU was organized to include a Project Manager (PM), Project Technical Officer (PTO), Project Finance and Administrative Officer (PFAO), Project Communication Officer and the Chief Technical Advisor (CTA).

Figure 2: Intended management arrangements for the UNDP-GEF Project "*Accelerating Renewable Energy and Energy Efficiency Applications in Niue" (AREAN Project)*



56. The major challenge for Project implementation has been the lack of ownership of the Project as manifested by the following:

- lack of clarity of the PMCU and NPC relationship with regards to Project implementation;
- a lack of communications between AREAN staff, PMCU and NPC. Some of this is due to many changes (Project-related and non-Project related) coming from PMCU and other agencies to the extent that personnel from AREAN, PMCU, NPC and other agencies do not take responsibility for any of the changes[15];

[15] One example of this was the PMCU change of suppliers in the middle of an activity to a cheaper supplier, but not necessarily one that supplies quality products. These changes place pressure on NPC staff who are to deliver reliable power to all residents.

- a shortage of staff culminating with the resignation of the PM (who left for medical reasons in March 2022) and PFAO (whose contract was not renewed in March 2022). During their absence, the NPD and the PTO have been managing the Project, with the PTO building good working relations with the key stakeholders, particularly with Director of Utilities and the Head of NPC;
- PMCU finalized recruitment in October 2022 of a new PM and PFAO.

57. It is highly likely that the PMCU felt burdened by the Project when the PM resigned in March 2022, with the NPD being the only person along with the Director, NPC to manage the AREAN Project. The PMCU and NPC also felt that additional duties of the Project were viewed as an intrusion to the normal operations of PMCU staff and NPC energy sector personnel, and not as a Project that can assist Niue with achieving low carbon targets under NiSERM. The Project, however, was under the NIM with a very limited role of UNDP in providing support to NIM. A number of issues arose in the management of the Project:

- Communication with the AREAN CTA and NPC staff where the CTA requires information from the NPC and the Utilities team to ensure the machinery and equipment purchased is compatible with the existing system. The communications could improve with the new PM;
- Challenges in the relationship with UNDP. This is related to the recent return of GEF funds that created extra administrative work for a small team considering the time-consuming activities to provide the information required for fund returns, causing further delays in activities[16] . Though UNDP has set procedures and protocols to manage funds, the PMCU has had a difficult time managing the complexities of financial reporting requirements. There is a need for UNDP reporting and administrative processes to be easier for countries such as Niue to comply with or select a different implementation modality that is better suited for small countries with limited human resource capacity, such as with the UNDP Direct Implementation Modality (DIM);
- There was a PMCU expectation of the UNDP team providing solutions and greater management support to the Project, rather than what they felt were repetitive reminders that delivery is low. UNDP on their part had offered increasing its support to NIM by taking over more Project procurement and making direct payments to vendors on behalf of the Project, but felt that there was no follow-up from the Project. This left both parties feeling frustrated;
- Island visits of the first CTA were not possible due to the border closures, and the CTA's time zone was considered incompatible with the working hours in Niue. This CTA left in March 2021, and was replaced by a New Zealand-based CTA in December 2022. The long gap between the two CTAs is due to COVID-related delays and the need to re-advertise the position multiple times until it could be filled;
- Due to the pandemic and closure of borders, international technical expertise could not be brought on Island in the early stages of the Project from March 2020 through August 2023, requiring the Project to seek alternative options such as contracting local consultants on the ground to work with international consultants remotely. Given the small population and narrow market for specialized technical expertise, procurement of consultants was challenging;

[16] UNDP issues quarterly cash advances to the AREAN Project based on approved Annual Work Plans and quarterly spending projections. The Implementing Partner is expected to provide the financial reporting on the actual spending to liquidate the cash advance within two weeks after the end of the quarter. The Q3 2021 cash advance was issued to the Project in September 2021, but not liquidated before the closure of the books for the Financial Year. To avoid a long-aging outstanding cash advance, which is an audit issue for UNDP, UNDP requested urgent liquidation of the funds that were expended and return of the unspent balance. Due to capacity limitations, the Project was not able to take action until June 2022, when it made the refund to UNDP without liquidating the expenses already incurred, thereby creating a deficit in the Treasury finances. Addressing this took time, thus causing delays in Project delivery and frustration for both PMCU/PMU and UNDP.

- Getting NPC to transition to an Energy Authority run by a Board (Para 40, 5th bullet);
- Overcoming delays from suppliers of equipment due largely to COVID restrictions.

58. With UNDP unable to conduct on-site visits to Niue in 2020 due to COVID-related travel restrictions, it provided support to the PMU and PMCU remotely, including through Zoom calls made during this period to assist the PMU (with processes such as liquidation, reimbursements, advance requests, direct payments and work plans), to provide them additional training in UNDP financial reporting and to facilitate PMU/PMCU engagement with the Regional Technical Advisor in Bangkok for additional technical assistance. After reopening of the borders, the UNDP programme team travelled to Niue to provide training to the new PM hired in October 2022.

3.3.2 Work Planning

59. A 2022 work plan has been given to the MTR team. Based on this work plan, there is an appearance that work planning is being done in a methodical organized manner.

3.3.3 Finance and Co-Finance

60. After 38 months of Project disbursements, only US$ 804,547 or 24% of the AREAN grant of US$3.322 million, has been expended as of 31 October 2022. The expenditure of the AREAN GEF budget up to 31 October 2022 can be characterized as follows:

- Disbursements often have been delayed, for different reasons including delays on the part of the PMU to provide complete and accurate cash projections and advance request documents, and delays on the part of UNDP to process funds advances in a timely manner.
- US$ 2,517,016 remains in the AREAN budget to reach the target of 9,242 tCO_{2eq} of GHG emission reductions.

61. In conclusion, however, the cost effectiveness of the use of the AREAN Project budget to date has been **unsatisfactory**, due to the late payments within the first 38 months of the Project. Disbursement of the AREAN GEF resources is provided in Table 2. Disbursement of the AREAN GEF resources to date according to ATLAS codes is provided on Table 3.

62. Co-financing commitments for the AREAN Project was in the order of US$9.873 million against a target of US$17.706 million. To date, co-financing of the Project to date has been **satisfactory** in consideration of parallel activities being undertaken with no Project activities to complement. Co-financing details to date are summarized on Table 4, with detailed co-financing of the Project is provided on Table 5.

3.3.4 Project Level Monitoring and Evaluation Systems

63. The AREAN Project had few activities to monitor. The results and progress of baseline activities of AREAN was only monitored and reported by the PMU in the Q4 2019 and Q1 2020 Progress Reports, and the 2021 PIR. The other Progress Report from Q3 2021 only reported progress against the 2021 PIR. No progress reports were submitted for 2022. Overall, the M&E systems of the AREAN Project are rated as ***moderately satisfactory*** considering the reporting of the progress against the AREAN PRF and the activities of the AREAN Project but no M&E reports available for 3Q and 4Q of 2022.

Table 2: GEF Project Budget and Expenditures for the AREAN Project (in USD as of 31 December 2022)

Outcome	Budget (from ProDoc)	2019[29]	2020	2021	2022[30]	Total Disbursed	Total remaining
Outcome 1: Improved policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors	185,000		28,896	42,864	24,029	95,789	89,211
Outcome 2: Effective enforcement of plans, policies and regulations, and implementation of programs/ projects on the application of climate resilient and low carbon technologies in the end-use sectors	130,000	1,797	15,659	21,726	12,862	52,043	77,957
Outcome 3: Increased availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors.	114,393		1,110	21,732	410	23,252	91,141
Outcome 4.1: Climate resilient and low carbon techniques and practices adopted and implemented in the energy supply and energy end-use sectors	538,000	1,797	62,330	31,918	28,728	124,773	413,227
Outcome 4.2: Enhanced confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors.	1,896,000		4,075	198,532	267,309	469,916	1,426,084
Outcome 5: Enhanced levels of awareness and attitude towards climate resilient and low carbon development in the energy supply and energy end use sectors	300,000		1,110	18,604		19,715	280,285
Project Management	158,170	7,053	3,611	7,352	1,043	19,059	139,111
Total (Actual)	3,321,563	10,646	116,791	342,729	334,380	804,547	2,517,016
Total (Cumulative Actual)		10,646	127,437	470,167	804,547		
Annual Planned Disbursement (from ProDoc)	2,701,707	125,266	645,710	1,038,332	892,399		
% Expended of Planned Disbursement		**8%**	**18%**	**33%**	**37%**		

[29] From 1 August 2019
[30] Up to 31 October 2022

Table 3: GEF Project Expenditures for Niue AREAN Project against ATLAS codes (in USD as of 31 December 2022)

ATLAS Code	Expenditure Description	US$
64000	Staff Mgmt Costs – Regular Stf	3,593
71205	Intl Consultants-Sht Term-Tech	53,468
71210	Intl Consultants-Sht Term-Supp	67,546
71305	Local Consult. -Sht Term-Tech	31,064
71405	Service Contracts-Individuals	49,598
71605	Travel Tickets-International	8,490
71635	Travel – Other	24,237
72210	Machinery and Equipment	35,434
72215	Transportation Equipment	164,591
72505	Stationery & other Office Supp	6,188
72815	Inform Technology Supplies	17,822
74525	Sundry	32,164
75705	Learning costs	309,308
75710	Participation of counterparts	1,043
	Total:	**804,547**

Table 4: Actual Co-Financing for AREAN Project (as of 31 December 2022)

Co-financing (type/source)	UNDP own financing (million USD)		Government (million USD)		Partner Agency (million USD)		Private Sector (million USD)		Total (million USD)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants [31]			8.080	1.200	6.886	3.768			14.966	4.968
Loans/Concessions									0.000	0
• In-kind support			1.900	4.805	0.740	0.000			2.640	4.805
• Other	0.100	0.100							0.100	0.100
Totals	0.100	0.100	9.980	6.005	7.626	3.768	0.000	0.000	17.706	9.873

[31] Includes all cash contributions

Table 5: Details of Co-Financing

Classification	Name of Co-financier (source)	Type	Financing Committed	Actual committed	Details
Partner agency	UNDP	Other	100,000	100,000	Project management and M&E
Government	Government of Niue	Grant	8,080,000	1,200,000	Energy Facility Asset Maintenance: NPC annual support towards technical support, staff and data management of the production information's and RE
Government	Government of Niue	In-kind	1,900,000	4,805,000	Assets Maintenance: Annual budget destined to NPC for the maintenance of the power generation equipment and the electric grid (US$3,500,000) Energy Compliance: MoI, Regulatory Unit and Water Supply annual recurrent budget. Staff and Office space for use during the AREAN Project implementation period (US$560,000) Energy Finances: Treasury and Project management unit annual support towards project administration, financing and M&E of the Project (US$500,000) Water Strategic and Implementation Plan: Implementation of specific water system improvement projects as part of the initiatives to achieve the water sector targets in the NiSERM. This is part of a US$700,000 project (US$245,000)
Bilateral - Govt	Government of New Zealand	Grant	6,500,000		
Bilateral - Govt	NZ Aid	Grant		6,400,000	NZ Project 1st Tranche of US$3.0 million: Installation of solar PV systems inclusive of solar PV arrays, battery storage units, grid integration components and several step-up transformers, completed in 2019. NZ Project 2nd Tranche of US$3.4 million: Installation of additional solar PV systems inclusive of solar PV arrays, battery storage units, and grid integration components & grid stability.
Bilateral - Govt	AusAid/NZAid	Soft Loan	740,000		
Bilateral - Govt	European Union	Grant	386,000	368,000	EDF-11: Project procured 8+7 HV transformers
Total Co-financing			**17,706,000**	**12,873,000**	

3.3.1 Stakeholder Engagement

64. The main stakeholder engagements by AREAN have been with the national government agencies including DoU-MoI who are the implementing partner for the AREAN Project, and the PMCU who are providing project management services, coordinating project management activities, and facilitating stakeholder relationships. Stakeholder relationships have also been formed with NPC as the SOE that manages power generation and distribution assets in Niue, mainly with respect to existing solar PV installations. Other stakeholder engagements include:

- the Public Works Department on the demo projects in retrofit buildings;
- the Department of Transportation-Ministry of Infrastructure (DoT-MoI) on demo projects on electric vehicles (EVs) and hybrid cars and streetlighting;
- Treasury Department and Crown Law with regards to clauses in the EPSEA 2021;
- Niue Chamber of Commerce with regards to various awareness raising products and communications strategy;
- a small proportion of the Niue population that have had an assessment of their solar PV installations in their households (Para 44).

65. Remaining stakeholders have not yet been engaged due to Project activities not yet being started involving those stakeholders. This includes the Niue Development Bank (NDB) and Kiwibank the Alofi branch of the Kiwibank who were supposed to be engaged with several awareness raising and information dissemination activities related to RE/EE technologies, and the supply of expertise for the establishment of financial and fiscal incentives aimed at creating an RE/EE market in Niue. As such, the Project has made **moderately satisfactory** efforts to facilitate partnerships.

3.3.2 Reporting

66. There were 7 progress reports from AREAN:

- Project Progress Reports issued Q4 2019, Q1 2020, Q3 2020, Q4 2020, Q1 2021, Q2 2021, Q3 2021, Q4 2021, Q3 2022, Q4 2022, which just reports what occurred on the Project;
- the 2021 PIR issued 30 June 2021; and
- a 2022 PIR was submitted in early September 2022.

Overall, reporting has been rated as ***satisfactory*** considering the volume of reports notwithstanding the impact of the pandemic, the lack of capacity, and lack of ownership leading to AREAN not being a priority for national partners.

3.3.3 Communications

67. There has been Project communications with all stakeholders on planning interventions, training sessions, and awareness raising initiatives. Despite Project communications sometimes being sporadic due to the pandemic, many of the meetings, workshops and trainings were being done online via Zoom. However, there was the issue of poor communications between AREAN management, PMCU and NPC that stifled progress. The COVID-19 crisis also impacted the hiring of international consultants. The first CTA, who served in this function until March 2021, was not able to liaise effectively with the Project. As a result, communication has been **moderately unsatisfactory**.

3.4 Sustainability

68. In assessing sustainability of the AREAN Project, the mid-term reviewers asked, “how likely will the Project outcomes be sustained beyond Project termination?” UNDP-supported GEF-financed projects are intended to be environmentally as well as institutionally, financially, politically, culturally, and socially sustainable. Sustainability of these dimensions was rated using a simple ranking scheme:

- *4 = Likely (L):* negligible risks to sustainability;
- *3 = Moderately Likely (ML):* moderate risks to sustainability;
- *2 = Moderately Unlikely (MU):* significant risks to sustainability; and
- *1 = Unlikely (U):* severe risks to sustainability; and
- *U/A = unable to assess*.

69. Financial risks to sustainability: Current financial risks to the sustainability of the AREAN Project are related to the limited availability of financing from the GoN and donors, notwithstanding that the Project has attempted to least minimize financial barriers to RE and EE technologies applications in Niue. For this reason, the rating for financial risks to sustainability is moderately unlikely (MU).

70. Socioeconomic risks to sustainability: The PMCU are providing project management services, coordinating project management activities, and facilitating stakeholder relationships. As a result, socio-economic risks to sustainability has been substantially reduced. There are still, however, stakeholders that have not yet been engaged due to Project activities not yet being started involving those stakeholders who supposed to be engaged with several awareness raising and information dissemination activities related to RE/EE technologies (Para 65). This raises some socio-economic risks to sustainability, with managing power generation and distribution assets and existing solar PV installations. Socioeconomic risks to sustainability are rated as moderately likely (ML).

71. Institutional framework and governance risks: The GoN has moved forward with institutional framework and governance issues with Project funds and using their own funds. As such, institutional framework and governance risks to sustainability is rated as likely (L).

72. Environmental risks to sustainability: One of the issues coming up for the RE/EE sector is a strategy for managing Waste from Electrical and Electronic Equipment (WEEE) waste streams. The issue with WEEE waste in Niue is the small volumes of waste being generated. However, efforts are being made to build the capacity of the Department of Environment to focus on recycling waste in an integrated manner (Para 38) involving several waste streams in addition to batteries, solar panels, lighting devices, and other EE equipment such as air conditioners and refrigerators. If there are higher volumes of WEEE such as solar panels and white appliances, the WEEE could be collected at a site and have it shipped to a jurisdiction where WEEE waste streams are managed. Thus, improving the capacities of Department of Environment to manage WEEE waste streams is a positive aspect of the Project. The rating of environmental risks to sustainability as likely (L).

73. Overall sustainability of the AREAN Project is ***moderately unlikely*** due to limited donor funds to address renewable energy in Niue.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

74. Despite legislative changes made through the EPSEA 2021, and the restructuring of NPC with new coordination mechanisms established, the AREAN Project is not making good progress on facilitating the achievement of the NiSERM targets, in part due to shortage of staff and delays in getting expertise and equipment into Niue; this delays the resolution of grid instability issues and the actions required to resolve those issues. There is an installed integrated RE generation forecasting tool for a SCADA system which automates the operations of remote solar PV power systems and data collection, to assist NPC to distinguish between variability and uncertainty when planning and operating the grid system with 80% solar PV. However, the possible decreases in fuel consumption for fossil-fuelled power generation facilities resulting from solar PV is not being properly monitored.

75. There are several other issues with AREAN implementation including:

- more staff needed at NPC to deal with the ongoing maintenance issues;
- the US$150,000 financial scheme ready for rollout in 2022 using the services at the Niue Development Bank to provide rebates for the purchase of electrical appliances with 4-star rating, has not yet started due to the need to ensure its compliance with UNDP policy and GEF regulations on grant instruments;
- high energy efficient transformers having been delivered with none installed, and only word-of-mouth that the transformers are suitable for the system;
- a formal grid stability study with the new transformers still has not been completed;
- there does not appear to be any activities towards installation of solar PV in Niue, with a need to train staff for installation of solar PV systems that will require expertise from abroad or staff to receive training abroad;
- there are several demo activities now under development, none of which will provide significant contributions to NiSERM;
- the Project needs more awareness activities to encourage people to choose RE and accelerate the contribution of RE to energy sector in Niue (see Recommendation 6 – Para 83).

76. A most urgent issue to address, however, is the collaborative management of the AREAN Project between PMCU and UNDP. The lack of communications between AREAN staff, PMCU and NPC is a serious deficiency in managing the AREAN Project with no one taking responsibility for many of the Project decisions, in part due to the absence of a PM after March 2022. An additional wrinkle in implementation arrangements is the NIM of the Project where difficulties are being experienced at the PMCU to support set procedures, protocols and manage the complexities in administration of funds with UNDP. With one of PMCU's primary mandates being to ensure that the GoN are meeting their obligations with the donors, a renewed focus by PMCU or whoever oversees the AREAN Project, is required towards achieving the AREAN Project's targets. Table 6 provides a summary of MTR ratings and achievements for the AREAN Project.

Table 6: MTR Ratings & Achievement Summary Table for AREAN Project in Niue

Measure	MTR Rating[32]	Achievement Description
Project Formulation	Design and PRF	Despite AREAN Project design being rated highly satisfactory, there is a need to implement remaining aspects of the Project strategy with remaining AREAN resources that aligns with updated GoN national priorities of NiSERM that meets the overall cumulative GHG emission target of 9,242 tCO_{2eq} (Paras 31).
	Stakeholder Participation Rating: 5	There were many stakeholders who were consulted for the design of the AREAN Project (Para 23).
Progress Towards Results	Objective Achievement Rating: 3	Project has made no progress due to the absence of the setup and deployment of low carbon technologies using GEF funds (Para 33).
	Outcome 1 Achievement Rating: 5	The Electric Power Supply and Energy Amendment Bill 2021 establishes and implements sectoral codes of conduct, guidelines and standards of operations for the energy industry, and updates standards and legislations set up with the 1960 EPSA (Paras 37-38)
	Outcome 2 Achievement Rating: 5	GoN's restructured plans and policies provide better conditions to meet the 80% renewable supply by 2030. This is with all the solar power PV panels in Niue feeding power into the grid with data of the micro grid and the powerhouse being online (Para 40).
	Outcome 3 Achievement Rating: 4	US$150,000 was ready for rollout in 2022 with Niue Development Bank to subsidize purchase of electrical appliances with 4-star rating, facilitating a behavioral change and incentive for all Niueans. This has not started, however, due to the need to ensure that it aligns with UNDP policy and GEF requirements for grant instruments (Para 42).
	Outcome 4 Achievement Rating: 3	An integrated RE generation forecasting tool for a SCADA system was installed which automates the operations of remote solar PV power systems and data collection. However, a grid stability study has still not yet been completed for the island (Para 44).
	Outcome 5 Achievement Rating: 3	Progress on demo activities has been adversely affected by delays in procurement in specialized equipment, shortages in staffing and delays in receiving funds (Para 46).
	Outcome 6 Achievement Rating: 4	Though GoN personnel were trained on conducting energy audits and managing energy databases, monitoring, and reporting, training for energy audit system design is currently awaiting availability of trainers (Para 48).
Project Implementation & Adaptive Management	Implementation Approach Rating: 3	One of the major challenges for the Project has been shortage of staff. The Project has especially had difficulties to support set procedures, protocols and complexities in administration of funds with UNDP (Paras 55 and 76).
	Monitoring and Evaluation Rating: 5	The M&E systems of the AREAN Project are rated as ***moderately satisfactory*** considering the reporting of the progress against the AREAN PRF and the activities of the AREAN Project (Para 63).
	Stakeholder Participation Rating: 4	Though AREAN stakeholder engagements have been with the national government agencies, there are still stakeholders that have not yet been engaged due to Project activities not yet being started involving those stakeholders (Para 64-65).
Sustainability	Sustainability Rating: 2	Financial risks to the sustainability of the AREAN Project are related to the limited availability of financing from the GoN and donors (Para 69-73).
Overall Project Achievement and impact	Rating: 3	The Project is not achieving a desired impact on NiSERM, due to staff shortages, delays in getting expertise and equipment into Niue, and a lack of communications between AREAN staff, PMCU and NPC leading to a lack of AREAN ownership (Paras 74-76).

[32] Evaluation rating indices (except sustainability – see Para 70): 6=*Highly Satisfactory (HS)*: The project has no shortcomings in the achievement of its objectives; 5=*Satisfactory (S)*: The project has minor shortcomings in the achievement of its objectives; 4=*Moderately Satisfactory (MS)*: The project has moderate shortcomings in the achievement of its objectives; 3=*Moderately Unsatisfactory (MU):* The project has significant shortcomings in the achievement of its objectives; 2=*Unsatisfactory (U)* The

4.2 Lessons Learned

77. *Lesson #1: The Niue government have very few people to nationally implement the AREAN Project to the extent that alternatives modalities must be investigated.* This lesson for different implementation modalities extends to other governments of small SIDS in the region. Some government institutions such as the Ministry of Natural Resources in Niue, are better placed to implement large-volume projects due to their better technical and management capacity. For example, the Ridge-to-Reef Project in Niue with this Ministry benefited from having the same management team throughout its implementation. On the other hand, the AREAN Project has not had a stable management regime that was compounded by the restrictions imposed by the COVID-19 pandemic. The AREAN Project, even with the Implementing Partner formally being the Ministry of Infrastructure, was de facto anchored by the PMCU, with a small number of staff, who have management capacity but not the technical capacity of the energy sector. As such, the PMCU has its challenges to manage the AREAN Project without technical capacity. Future projects in the region need to consider the capacity of institutions before committing to an implementation modality.

4.3 Recommendations

78. *Recommendation 1 (to UNDP and the GoN): As a top priority, change AREAN management arrangements that will result in an increased role of UNDP in providing support services to NIM, hence reducing the transactional burden of the AREAN Project for GoN counterparts.* The relationship between UNDP and the GoN has had challenges (Paras 56-58). There is the perception of GoN and AREAN personnel that they are not receiving sufficient UNDP support in resolving problems. For example, the liquidation of GEF funds created time-consuming extra paperwork for a small team, having to provide the information required for the returning of GEF funds. PMCU's primary mandate is to ensure that the GoN are meeting their obligations with the donors through the PMU. For PMCU to continue this role, it can:

- Option 1: maintain current the current implementation modality where the process of quarterly work planning is strengthened such that payments can be processed within a 2-week period after the end of the quarter with a government-backed setup to submit required documentation (such as ledgers). This is an option given that UNDP is not flexible in its modality of advancing funds;
- Option 2: implement a direct payment modality as a part of NIM where the government procures or implements an activity and UNDP makes the payments on their behalf, and shift all international procurement in the work plan to UNDP implementation. This would increase UNDP's support services to the Project without formally changing NIM, reducing the administrative time of the PMCU and allowing them to focus more on implementation issues (see next bullet);
- Option 3: consider a change to Direct Implementation Modality (DIM) where UNDP does all the administrative work. This will necessitate changes under the current Project grant agreement with the Global Environment Facility (GEF) and would likely take time to be approved.

Common to these 3 options is the need to continue having the NPD in the PMCU and the Project's PTO maintain and build good working relations with the key stakeholders, particularly with Director of Utilities and the Head of NPC since they both deal with many of the energy sector issues, and most

project has major shortcomings in the achievement of its objectives; 1=*Highly Unsatisfactory (HU):* The project has severe shortcomings in the achievement of its objectives.

of the demonstration projects (Para 56). This collaborative management needs to continue to bridge the Project amongst the different institutions if it is to minimize the financial, socio-economic, environmental, institutional and government risks that will most likely affect Project implementation during its remaining duration. The management style of the new PM has the potential to form a well-managed Project with an informed group of stakeholders who are effectively engaged;

79. *Recommendation 2 (to the GoN): As another top priority, automate the diesel/petrol levels used for power generation at NPC as a part of Outcome 4*. Given the uncertainty in diesel/petrol consumption in power generation and the contribution of RE to the Niuean grid, electric data loggers are needed on fuel tanks to record fuel going into tanks and the savings accrued. This will replace the current method of data collection which is manual reading of a dip stick (Para 44, 7th bullet). Electric data loggers are essential for reliable readings and accurate portrayal of the contributions of renewable energy to NiSERM. Carrying through on this action as a part of Outcome 4.1 will provide accuracy and reliability to the process of calculating contributions of renewable energy to diesel/petrol generated energy.

80. *Recommendation 3 (to UNDP and the GoN): As another high priority, complete the grid stability study, complete upgrades, and complete capacity building activities so that solar PV panels already installed can be reconnected to the grid as a part of Outcome 4.1*. This should also be a top priority since new distribution system equipment (transformers and switchgear) will prevent potential grid instability problems when electricity from additional installed newly solar PV systems is fed into the power grid. Upgrades include replacements of faulty inverters, reconfiguring existing installations, and installation of new power conversion equipment and batteries for electricity storage at sites mentioned in Para 44, 3rd bullet. However, the grid stability study was held up by the resignation of the PM in March 2022 (Para 44, 2nd bullet). As such, the grid stability study (with procurement to be conducted by UNDP) should confirm that new distribution system equipment will stabilize and increase the reliability of Niue's power grid, especially after the new solar PV systems are connected to the grid. This will also complement the installation of a SCADA system for load dispatch optimization. Capacity building on the safe and proper operation and maintenance of the improved transmission and distribution system and power generation system is required. This will hopefully increase the confidence of the general population of Niue in renewable energy and result in RE investments by private citizens or donors. Resolving this issue of grid stability will go a long way towards reaching direct Project GHG emission reduction and NiSERM targets. Direct GHG emission reductions expected from the grid stability study and activities and reconnection of PV panels to the grid are as follows:

- Solar PV power generation – 4,762 tCO_2/yr;
- Grid stabilization – 193 tCO_2/yr;
- Rooftop solar PV – 283 tCO_2/yr; and
- Existing solar PV already installed but reconnected to the grid because of grid stabilization activities implemented – 2,463 tCO_2/yr.

81. *Recommendation 4 (to UNDP and the GoN): Request a 12-month extension from GEF to utilize the remaining AREAN resources of US$ 2.517 million towards achievement of GHG emission reduction target of 9,242 tCO_2/yr*. The plan for a refreshed approach as mentioned in Para 52 using the remaining 6 months of the AREAN Project plus an additional 12 months is detailed on Table 7 with a proposed re-allocated AREAN budget and Figure 3 with a suggested revised schedule and re-allocated budget that includes the 12-month extension. This would involve an NPC-led team for most

of the remaining AREAN resources to be used to resolve grid stability issues, upgrading faulty inverters for several solar PV installations (see Para 80) and reconfiguring of the existing solar PV installations for Outcome 4.1; this will work towards generating 7,418 tCO_{2eq}/yr of GHG emission reductions towards meeting the Project target of 9,242 tCO_{2eq}/yr. It would also involve demonstration activities that generate less significant GHG emission reductions that help the Project reach its GHG emission reduction targets (see Recommendation 5 – Para 82). There can be some flexibility in the allocations between Outcomes 4.1 and 4.2; the AREAN team can to allocate more funds to upgrading solar PV installations in Outcome 4.1 if deemed appropriate to meeting the GHG emission reduction target of 9,242 tCO2eq/yr.

Table 7: Re-Allocation of AREAN Resources

Outcome	Budget (from ProDoc)	Total Disbursed	Total remaining	Re-Allocated Budget
Outcome 1: Improved policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors	185,000	95,789	89,211	50,000
Outcome 2: Effective enforcement of plans, policies and regulations, and implementation of programs/ projects on the application of climate resilient and low carbon technologies in the end-use sectors	130,000	52,043	77,957	50,000
Outcome 3: Increased availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors.	114,393	23,252	91,141	100,000
Outcome 4.1: Climate resilient and low carbon techniques and practices adopted and implemented in the energy supply and energy end-use sectors	538,000	124,773	413,227	535,889
Outcome 4.2: Enhanced confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors.	1,896,000	469,916	1,426,084	1,392,016
Outcome 5: Enhanced levels of awareness and attitude towards climate resilient and low carbon development in the energy supply and energy end use sectors	300,000	19,715	280,285	250,000
Project Management	158,170	19,059	139,111	139,111
Total (Actual)	3,321,563	804,547	2,517,016	2,517,016

82. *Recommendation 5 (to UNDP and the GoN): As a lower priority, implement other demonstration low carbon projects that help the Project reach its GHG emission reduction targets but in a less significant way*. This would include LED streetlights, the Tavili ke Moui Support scheme for EE appliances, EV scheme and solar water pumps as a part of Outcomes 3 and 4.2 mentioned in Paras 42 and 46 (2nd to 6th bullets). While these demo activities are important, they do not result in massive consequential emission reductions during the influence period of the Project, and hence can be a lower priority. It is important to prioritize grid stability and solar PV Issues before undertaking these demo activities.

83. *Recommendation 6 (to UNDP and GoN): Improve the RE awareness raising programme of AREAN as a part of Outcome 5*. The current programme described in Para 48 is ad hoc in nature and has no structure or specific messages. An improvement in awareness raising can be achieved in the following suggested manner:

- provide budgetary support of public awareness and promotion of RE and EE technologies and the energy development application and consent systems;
- establish a public awareness and publicity unit within the Utilities Department or an equivalent institution. This would provide a base from which public awareness can be sustained. There is currently a disconnect between service providers and customers of NPC;
- develop increased awareness to the public of the renewable energy and energy efficiency enhancements to buildings by educating and training GoN staff to train them in disseminating positive advertisements on RE and EE to the general public;
- develop messages that encourage communities to establish grid-connected solar systems to de-centralize power generation;
- disseminate messages about regulations for electricity tariffs for NPC customers;
- educate and promote home maintenance programmes;
- disseminate messages on the impact of efficient home electricity systems and appliances through the installation of electricity supply protective devices.

84. *Recommendation 7 (to UNDP and GoN): Ensure gender mainstreaming is regularly monitored for gender progress*. To draw insights and conclusions from gender disaggregated data based on Paras 53-54, implementation of a gender action plan is needed. This will provide insights about gender disaggregated preferences and dislikes regarding Project activities and advocacy for increased female participation. Project impacts on gender can focus on possible positive (or negative) impacts that Project activities have on women (managers and beneficiaries). This could include the financing scheme that promotes gender equality that is marketed purely on house eligibility rather than specific roles of men and women within the household. Gender disaggregation will ensure the applications can be made by any person living in a particular household but provide insights into gender disaggregated data, and conclusions to be drawn about female and male preferences and dislikes. A gender action plan can also include:

- advanced education for females in the energy sector which has the potential to enhance opportunities to improve the role and influence of women in the deployment of low carbon technologies and climate change mitigation options. This may address the lack of development of gender-sensitive policies in the energy sector and the energy end-use sectors of Niue, and enhance the contributions, impacts and benefits of community-based sustainable energy and EE and RE technology applications to children;
- facilitating involvement of both women and men in the use and benefits of new technologies introduced by the Project;
- facilitating Project compliance with UNDP standards in procurement procedures to ensure transparency in selecting private enterprises engaging, taking measures to ensure opportunities are equally accessible for women and men, and that no one is left behind;
- making linkages between economic opportunities of the Project that promotes improved livelihoods for women and reducing domestic violence;
- aligning Project practices with the relevant international standards to facilitate the protection of female workers rights in the private sector, particularly in areas impacted by the Project; and
- facilitate equal participation of women and men in Project implementation at all levels.

Figure 3: AREAN Activities (assuming a 12-month extension)[33]

Outcomes	ATLAS Code	Estimated Cost	2022	2023				2024				Remarks
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Outcome 1: Improved policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors	**71200 and 72100**	$89,211										
Outcome 2: Effective enforcement of plans, policies and regulations, and implementation of programs/projects on the application of climate resilient and low carbon technologies in the end-use sectors	71200 and 72100	$77,957										See Recommendation 2
Outcome 3: Increased availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors	72100	$91,141										See Recommendations 3 and 4
Outcome 4.1: Climate resilient and low carbon techniques and practices adopted and implemented in the energy supply and energy end-use sectors	71200, 72100 and 72000	$413,227										See Recommendations 2 and 4
Outcome 4.2: Enhanced confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors	71200, 72100 and 72000	$1,426,084										See Recommendation 5
Outcome 5: Enhanced levels of awareness and attitude towards climate resilient and low carbon development in the energy supply and energy end use sectors	72100, 72200 and 72400	$280,285										See Recommendation 6
Project Management		$139,111										See Recommendations 1 and 7
Total:		**$2,517,016**										

Current EOP

Proposed revised EOP date

Intense Activity

Intermittent Activity

[33] ATLAS Codes: 71200=International Consultants, 72100=Contractual Services-Companies, 72200=Equipment and Furniture, 72400=Communication and Audo Visual Equipment.

APPENDIX A – TERMS OF REFERENCE FOR AREAN PROJECT MTR

BASIC CONTRACT INFORMATION

Location: Niue
Application Deadline: 27 August 2021
Type of Contract: Individual Contract
Post Level: International Consultant for Midterm Review of AREAN project
Languages Required: English
Starting Date: 30 Sept 2021
Duration of Initial Contract: 3 months
Expected Duration of Assignment: 12 weeks

BACKGROUND

A. Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN)

B. Project Description

This is the Terms of Reference for the UNDP-GEF Midterm Review (MTR) of the full or medium-sized project titled **'Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN)'** (PIMS 6037) implemented through the Department of Utilities, Ministry of Infrastructure (DoU-MoI), which is to be undertaken in year. The project started on the 29 August 2019 and is in its second year of implementation. This ToR sets out the expectations for this MTR. The MTR process must follow the guidance outlined in the document *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* .

The objective of the AREAN project is to enable the achievement of low carbon energy access, sustainable energy and green growth targets of Niue as stated in the Niue Sustainable Energy Road Map (NiSERM), which is the basis of the country's latest Nationally Determined Contributions under the Paris Agreement. The government has been, and continues to be, very focused on the achievement of its renewable energy and energy efficiency targets, especially the generation of 80% of its electricity needs from renewable sources by 2025; however, the available financial and technical resources will not be enough to guarantee a timely and full achievement of said targets without additional support from international donors. The design of AREAN follows a holistic approach to the removal of all the barriers, identified in the AREAN Project Information Form (PIF) and confirmed during the project development stage, by synergistically interconnecting all the activities of five (5) different components, namely: 1) Improvements in Energy Integrated Development Policy and Planning; 2) Institutional Capacity Building on Low Carbon Development; 3) Improvements in the Financing of Low Carbon Development Initiatives; 4) Climate Resilient and Low Carbon Technologies Applications; and 5) Enhancement of Awareness on Low Carbon Development. The project will be implemented over a period of 48 months, spanning from 2019 to 2023, and the total amount of GHG emission reductions is estimated to be approximately 112.2 kilotons CO_2. The GHG emission reductions will be partly realized during the implementation period of the AREAN project and partly achieved after the completion of the project, throughout the lifespan of the equipment provided for the demonstration projects as well as other investment type activities.

Project Outcome 1:
Improved policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors.

Project Outcome 2:
Effective enforcement of plans, policies and regulations, and implementation of programs/projects on the application of climate resilient and low carbon technologies in the end-use sectors.

Project Outcome 3:
Increased availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors.

Project Outcome 4.1:
Climate resilient and low carbon techniques and practices adopted and implemented in the energy supply and energy end-use sectors.

Project Outcome 4.2:
Enhanced confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors.

Project Outcome 5:
Enhanced levels of awareness and attitude towards climate resilient and low carbon development in the energy supply and energy end use sectors.

The project will be implemented over the course of 4 years, beginning in 2019. UNDP is the GEF Implementing Agency and the Ministry of Infrastructure (MOI), is the project's lead Implementing Partner and responsible party. The project is being nationally executed as per UNDP National Implementation Modality (NIM) procedures. According to UNDP guidelines on National Implementation Modality (2011), the Government is responsible for the management and delivery of programme activities to achieve project outcomes/outputs. Government regulations, rules and procedures therefore apply to project implementation to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP.

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Multi-Country Office (UNDP-MCO) in Apia with support from the UNDP Regional Bureau for Asia-Pacific (RBAP) region in Bangkok.

C. MTR Purpose

The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project's strategy and its risks to sustainability.

DUTIES AND RESPONSIBILITIES

D. MTR Approach & Methodology

The MTR report must provide evidence-based information that is credible, reliable, and useful.
The MTR team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure (SESP)), the Project Document, project reports including Annual Project Review/PIRs, project budget revisions, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based review. The MTR team will review the baseline GEF focal area Core Indicators/Tracking Tools submitted to the GEF at CEO endorsement, and the midterm GEF focal area Core Indicators/Tracking Tools that must be completed before the MTR field mission begins.

The MTR team, comprising of a home-based lead Evaluator (international consultant) and support consultant (national consultant) is expected to follow a collaborative and participatory approach[34] ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), the UNDP Country Office(s), the Nature, Climate and Energy (NCE) Regional Technical Advisor, direct beneficiaries, and other key stakeholders.

Engagement of stakeholders is vital to a successful MTR.[35] Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to Department of Utilities – Ministry of Infrastructure (DoU-MoI), Project Management and Coordination Unit (PMCU), Niue Power Corporation (NPC), Department of Transportation – Ministry of Infrastructure (DoT – MoI), Treasury Department, Crown Law, Niue Bulk Fuel (NBF), Niue Chamber of Commerce, Niue Development Bank (NDB) and Kiwibank, GoN Ministries and Departments (Ministry of Natural Resources, Department of Agriculture, Fisheries and Forestry, Ministry of Social Services, Department of Statistics, Department of Water Resources, Niue Met Services, Village/Community Leaders; executing agencies, senior officials and task team/ component leaders, key experts and consultants in the subject area, Project Board, project stakeholders, academia, local government and CSOs, etc. Additionally, the National consultant is expected to conduct field missions to the NPC, PMCU and MoI, including the following project sites where Energy Efficiency technology will be demonstrated and showcased

Due to the travel restrictions, the lead evaluator will be home-based and will work closely with the national consultant in engaging stakeholders via virtual consultations via telephone or online (Zoom, Skype, etc.). Field missions will be conducted by the national consultant and findings shared with the lead evaluator. Furthermore, all stakeholder engagement will be strongly supported by the PMU and the UNDP MCO in Samoa. Consideration should be taken for stakeholder availability, ability, and willingness to be interviewed remotely and the constraints this may place on the MTR. These limitations must be reflected in the final MTR report. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority

The MTR team is expected to develop a methodology and approach that takes into account the COVID-related restrictions. This will require the use of remote interview methods, extended desk reviews, data analysis, surveys, and evaluation questionnaires. These approaches and methodologies must be detailed in the Inception Report and agreed with the Commissioning Unit. The MTR team must, however, use gender-responsive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the MTR report.

The final methodological approach including interview schedule, field visits and data to be used in the MTR should be clearly outlined in the Inception Report and be fully discussed and agreed between UNDP, stakeholders, and the MTR team. The final MTR report must describe the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

E. Detailed Scope of the MTR

The MTR team will assess the following four categories of project progress. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for extended descriptions.

1. Project Strategy

Project Design:

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document.

[34] For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results, 05 Nov 2013.

[35] For more stakeholder engagement in the M&E process, see the UNDP Handbook on Planning, Monitoring and Evaluating for Development Results, Chapter 3, pg. 93.

- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design?
- Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country (or of participating countries in the case of multi-country projects)?
- Review decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes?
- Review the extent to which relevant gender issues were raised in the project design. See Annex 9 of *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.
    - Were relevant gender issues (e.g. the impact of the project on gender equality in the programme country, involvement of women's groups, engaging women in project activities) raised in the Project Document?
- If there are major areas of concern, recommend areas for

Results Framework/Log frame:

- Undertake a critical analysis of the project's log frame indicators and targets, assess how "SMART" (Specific, Measurable, Attainable, Relevant, Time-bound) the indicators are, and whether the midterm and end-of-project targets are realistically achievable, and suggest specific amendments/revisions to the targets and indicators, as necessary.
- Are the project's objective and outcomes clear, practical, and feasible to be realized within its time frame?
- Are each of the project components comprised of the relevant and necessary activities that will deliver the required outputs that will collectively bring about the expected outcome in each component?
- Examine if progress so far has led to or could in the future catalyze beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits.

2. Progress Towards Results

- Review the log frame indicators against progress made towards the end-of-project targets; populate the Progress Towards Results Matrix, as described in the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; colour code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for the project objective and each outcome; make recommendations from the areas marked as "not on target to be achieved" (red).
- Compare and analyse the GEF Tracking Tool/Core Indicators at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective in the remainder of the project.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

3. Project Implementation and Adaptive Management

Management Arrangements

- Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.
- Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement.
- Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement.

- Do the Executing Agency/Implementing Partner and/or UNDP and other partners have the capacity to deliver benefits to or involve women? If yes, how?
- What is the gender balance of project staff? What steps have been taken to ensure gender balance in project staff?
- What is the gender balance of the Project Board? What steps have been taken to ensure gender balance in the Project Board?

Work Planning

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.
- Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Examine the use of the project's results framework/ log frame as a management tool and review any changes made to it since project start.

Finance and co-finance

- Evaluate the financial management of the project, with specific reference to the cost-effectiveness of interventions.
- Review the changes to fund allocations because of budget revisions and assess the appropriateness and relevance of such revisions.
- Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?
- Informed by the co-financing monitoring table to be filled out by the Commissioning Unit and project team, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly to align financing priorities and annual work plans? Are the committed co-financing by the project partners/co-financers being realized? Please make sure that evidentiary documents of the actual co-financing that was realized are available, including report on the results of co-financed activities that were carried out by the co-financers or project partners.

Sources of Co-financing	Name of Co-financer	Type of Co-financing	Co-financing amount confirmed at CEO Endorsement (US$)	Actual Amount Contributed at stage of Midterm Review (US$)	Actual % of Expected Amount
		TOTAL			

- Include the separate GEF Co-Financing template (filled out by the Commissioning Unit and project team) which categorizes co-financing amounts by source as 'investment mobilized' or 'recurrent expenditures'. (This template will be annexed as a separate file.)

Project-level monitoring and evaluation systems

- Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive? Make sure that evidentiary documents about the reported results

of the co-financed and subsumed baseline activities as well as of the incremental activities are available for the review.

- Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?
- Review the extent to which relevant gender issues were incorporated in monitoring systems. See Annex 9 of *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.

Stakeholder Engagement

- Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?
- Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?
- How does the project engage women and girls? Is the project likely to have the same positive and/or negative effects on women and men, girls, and boys? Identify, if possible, legal, cultural, or religious constraints on women's participation in the project. What can the project do to enhance its gender benefits?

Social and Environmental Standards (Safeguards)

- Validate the risks identified in the project's most current SESP, and those risks' ratings; are any revisions needed?
- Summarize and assess the revisions made since CEO Endorsement/Approval (if any) to:
  - The project's overall safeguards risk categorization.
  - The identified types of risks[36] (in the SESP).
  - The individual risk ratings (in the SESP).
- Describe and assess progress made in the implementation of the project's social and environmental management measures as outlined in the SESP submitted at CEO Endorsement/Approval (and prepared during implementation, if any), including any revisions to those measures. Such management measures might include Environmental and Social Management Plans (ESMPs) or other management plans, though can also include aspects of a project's design; refer to Question 6 in the SESP template for a summary of the identified management measures.

A given project should be assessed against the version of UNDP's safeguards policy that was in effect at the time of the project's approval.

Reporting

- Assess how adaptive management changes have been reported by the project management and shared with the Project Board.
- Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly rated PIRs, if applicable?)
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners, and internalized by partners.

[36] Risks are to be labeled with both the UNDP SES Principles and Standards, and the GEF's "types of risks and potential impacts": Climate Change and Disaster; Disadvantaged or Vulnerable Individuals or Groups; Disability Inclusion; Adverse Gender-Related impact, including Gender-based Violence and Sexual Exploitation; Biodiversity Conservation and the Sustainable Management of Living Natural Resources; Restrictions on Land Use and Involuntary Resettlement; Indigenous Peoples; Cultural Heritage; Resource Efficiency and Pollution Prevention; Labor and Working Conditions; Community Health, Safety and Security.

Communications & Knowledge Management

- Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results?
- Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)
- For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits.
- List knowledge activities/products developed (based on knowledge management approach approved at CEO Endorsement/Approval).

4. Sustainability

- Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Register are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why.
- In addition, assess the following risks to sustainability:

Financial risks to sustainability:

- What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?

Socio-economic risks to sustainability:

- Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long-term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

Institutional Framework and Governance risks to sustainability:

- Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

Environmental risks to sustainability:

- Are there any environmental risks that may jeopardize sustenance of project outcomes?

Country Ownership

- To what extent is the project aligned with national development plans, national plans of action on climate change, or sub-national policy as well as projects and priorities of the national partners?
- How well is country ownership reflected in the project governance, coordination and consultation mechanisms or other consultations?
- To what extent are country level systems for project management or M&E utilized in the project?
- What level and types of involvement for all Is the project as implemented responsive to local challenges and relevant/appropriate/strategic in relation to SDG indicators, National indicators, AREAN indicators, or other goals?
- Were the modes of deliveries of the outputs appropriate to build essential/necessary capacities, promote national ownership and ensure sustainability of the result achieved?

Gender equity

- Does the project only rely on sex-disaggregated data per population statistics?
- Are financial resources/project activities explicitly allocated to enable women to benefit from project interventions?
- Does the project account in activities and planning for local gender dynamics and how project interventions affect women as beneficiaries?
- Do women as beneficiaries know their rights and/or benefits from project activities/interventions?
- How do the results for women compare to those for men?
- Is the decision-making process transparent and inclusive of both women and men?
- To what extent are female stakeholders or beneficiaries satisfied with the project gender equality results?
- Did the project sufficiently address cross cutting issues including gender?

Innovativeness in results areas

- What role has the project played in the provision of "thought leadership," "innovation," or "unlocked additional climate finance" for climate change adaptation/mitigation in the project and country context? Please provide concrete examples and make specific suggestions on how to enhance these roles going forward.

Unexpected results, both positive and negative

- What has been the project's ability to adapt and evolve based on continuous lessons learned and the changing development landscape? Please account for factors both within the AE/EE and external.
- Can any unintended or unexpected positive or negative effects be observed because of the project's interventions?
- What factors have contributed to the unintended outcomes, outputs, activities, results?

Replication and Scalability

- What are project lessons learned, failures/lost opportunities to date? What might have been done better or differently?
- How effective were the exit strategies and approaches to phase out assistance provided by the project including contributing factors and constraints?
- What factors of the project achievements are contingent on specific local context or enabling environment factors?
- Are the actions and results from project interventions likely to be sustained, ideally through ownership by the local partners and stakeholders?
- What are the key factors that will require attention to improve prospects of sustainability, scalability, or replication of project outcomes/outputs/results?

Impact of COVID-19

- Review of the impact of COVID-19 on overall project management, implementation, and results (including on indicators and targets).
- Assess the project's response to COVID-19 impacts including and not limited to responses related to stakeholder engagement, management arrangements, work planning and adaptive management actions.

Conclusions & Recommendations

The MTR team will include a section in the MTR report for evidence-based conclusions, in light of the findings.

Additionally, the MTR consultant team is expected to make **recommendations** to the Project Team. Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. For each recommendation, the MTR team has to provide the "how to" aspects, i.e., steps to be taken (as well requirements) to implement the recommendation.

A recommendation table should be put in the report's executive summary. The MTR consultant/team should make no more than 15 recommendations total.

Ratings

The MTR team will include its ratings of the project's results and brief descriptions of the associated achievements in a *MTR Ratings & Achievement Summary Table* in the Executive Summary of the MTR report. See the TOR Annexes for the Rating Table and ratings scales.

F. Expected Outputs and Deliverables

The MTR team shall prepare and submit:

- MTR Inception Report: MTR team clarifies objectives and methods of the Midterm Review no later than 2 weeks before the MTR mission. To be sent to the Commissioning Unit and project management. Completion date: 08 October 2021
- Presentation: MTR team presents initial findings to project management and the Commissioning Unit at the end of the MTR mission. Completion date: 17 October 2021
- Draft MTR Report: MTR team submits the draft full report with annexes within 3 weeks of the MTR mission. Completion date: 29 October 2021
- Final Report*: MTR team submits the revised report with annexed and completed Audit Trail detailing how all received comments have (and have not) been addressed in the final MTR report. To be sent to the Commissioning Unit within 1 week of receiving UNDP comments on draft. Completion date: 12 November 2021

*The final MTR report must be in English. If applicable, the Commissioning Unit may choose to arrange for a translation of the report into a language more widely shared by national stakeholders.

G. Institutional Arrangements

The principal responsibility for managing this MTR resides with the Commissioning Unit. The Commissioning Unit for this project's MTR is the UNDP Samoa Multi-country office for Cook Islands, Niue, Samoa, and Tokelau based in Samoa.

The UNDP Samoa Multi-country office for Cook Islands, Niue, Samoa, and Tokelau based in Samoa and the AREAN Project Management Unit (PMU) will be responsible for liaising with the MTR Evaluation team to provide all relevant documents, set up stakeholder interviews, and arrange field visits for the National Consultant, etc.

Due to the travel restrictions, the lead evaluator will be home-based and will work closely with the national consultant in engaging stakeholders via virtual consultations via telephone or online (Zoom, Skype, etc.). Field missions will be conducted by the national consultant and findings shared with the lead evaluator

The Commissioning Unit will contract the consultants and ensure the timely provision of per diems and travel arrangements within the country for the MTR team. The Project Team will be responsible for liaising with the MTR team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

H. Duration of the Work

The total duration of the MTR will be approximately *(26 days)* over a period of *(12 weeks)* starting *(30 September 2021),* and shall not exceed five months from when the consultant(s) are hired. The tentative MTR timeframe is as follows:

- *27 August:* Application closes
- *30 September:* Selection of MTR Team
- *01 October :* Prep the MTR Team (handover of project documents)
- *04 -06 October (5 days) :* Document review and preparing MTR Inception Report

- *08 October:* Finalization and Validation of MTR Inception Report- latest start of MTR mission
- *11 October (7 days) (r: 7-15):* MTR mission: stakeholder meetings, interviews,
- *22 October:* Mission wrap-up meeting & presentation of initial findings- earliest end of MTR mission
- *29 October (7 days) (r: 5-10):* Preparing draft report
- *05 November (5 days) (r: 1-2):* Incorporating audit trail on draft report/Finalization of MTR report (note: accommodate time delay in dates for circulation and review of the draft report)
- *09 November:* Preparation & Issue of Management Response
- *12 November:* Expected date of full MTR completion

The date start of contract is 30 September 2021).

I. Duty Station

Home-based. It is expected that the consultant/team leader will conduct stakeholder interviews and site visit via virtual means (Zoom, skype etc.) in lieu of a mission in Niue due to COVID-19 travel restrictions

REQUIRED SKILLS AND EXPERIENCE

J. Qualifications of the Successful Applicants

A team of two independent consultants will conduct the MTR - one team leader (with experience and exposure to projects and evaluations in other regions globally) and one National team expert, usually from the country of the project.

The team leader will be responsible for;

- Completion of the inception report in coordination with the National Team Expert
- Conduct MTR interviews with coordination with the National Team expert and PMU
- The overall design, writing and completion of the MTR report inclusive of audit trail and including all comments from project partners and stakeholders.
- Overall MTR report quality assurance and adherence to the Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects

The national team expert will;

- Work closely with the Team Leader and the PMU.
- Contribute to the inception report including a detailed plan for interview and project site visits.
- Develop and confirm MTR interview schedule in coordination with the PMU and the Team Leader
- Translate questionnaires if needed and share list of questions with interviewees in preparation for the MTR interviews.
- Facilitate virtual (and translate if needed) interviews for the MTR and conduct interviews where virtual means are unavailable.
- Conduct data collection for the MTR
- Conduct field visits to verify impact of project interventions at project sites in coordination with the Team Leader and PMU
- Work with PMU to confirm co-financing for the project.
- Contribute to the MTR report
- Conduct and confirm any follow up data/information requirements to complete the MTR report including audit trail.

The evaluator (s) cannot have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities.

The selection of **Team Leader** will be aimed at maximizing the overall "team" qualities in the following areas:

Education

- A Post-graduate degree in the areas of Engineering, with focus on either Energy technologies, Renewable Energy technologies, and electric power systems. *mandatory/essential* (20 points)

Experience

- More than 10 years of professional experience in Renewable energy Systems, Energy Efficiency Applications, or Grid Stability Management, with substantive work undertaken in the electricity and energy sector, as well as a good understanding of mainstreaming gender and other cross-cutting priorities such as climate change. *mandatory/essential* (20 points)
- Minimum of 5 years' experience in project evaluations, results-based monitoring, and/or evaluation methodologies; *mandatory/essential* (20 points)
- Experience applying SMART targets and reconstructing or validating baseline scenarios; *mandatory/essential* (10 points)
- Competence in adaptive management, as applied to low carbon energy access and sustainable energy and green change, experience in gender sensitive evaluation and analysis. *mandatory/essential* (10 points)
- Project evaluation/review experiences within the UN system and elsewhere in the Pacific Region or SIDs, *desired/preferable* (5 points)
- Demonstrated understanding of issues related to gender and low carbon energy access and sustainable energy and green change, experience in gender sensitive evaluation and analysis; *desired/preferable* (5 points)

Language

- Fluency in English (written) is a requirement, with excellent written and presentation skills. *mandatory/essential* (10 points)

K. Evaluator Ethics

The MTR team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This MTR will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The MTR team must safeguard the rights and confidentiality of information providers, interviewees, and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The MTR team must also ensure security of collected information before and after the MTR and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information, knowledge and data gathered in the MTR process must also be solely used for the MTR and not for other uses without the express authorization of UNDP and partners.

L. Schedule of Payments

- 20% payment upon satisfactory delivery of the final MTR Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft MTR report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final MTR report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

  Criteria for issuing the final payment of 40%
  - The final MTR report includes all requirements outlined in the MTR TOR and is in accordance with the MTR guidance.
  - The final MTR report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other MTR reports).
  - The Audit Trail includes responses to and justification for each comment listed.

APPENDIX B – MISSION ITINERARY (FOR SEPTEMBER-OCTOBER 2022)

#	Activity	Stakeholder involved	Place
***20 July 2022** (Wednesday)*			
1	Discuss final contract	UNDP	Virtual via Zoom meeting
2 September 2022 (Friday)			
2	Consultants' introduction meeting	UNDP	Virtual via Zoom meeting
9 September 2022 (Friday)			
3	Meeting with NPC	Head of NPC	Phone
12 September 2022 (Monday)			
4	Meeting with Technical Expert, AREAN Project	PMU	Phone
14 September 2022 (Wednesday)			
5	Meeting with Director Utilities	Niue Public Works Building	Phone
21 September 2022 (Wednesday)			
6	Meeting with Director PMCU	PMCU	Phone
7	Meeting with Interim Chair of the PB	Project Board	Phone
27 September 2022 (Tuesday)			
8	Introduction meeting with Niue project team	UNDP and PMU	Virtual via Zoom meeting
29 September 2022 (Thursday)			
9	Debrief & planning	UNDP and PMU	Virtual via Zoom meeting
18 October 2022 (Tuesday)			
10	Meeting with Director PMCU	PMCU	Phone
11	Meeting with Niue Power Station Manager	NPC	In person
25 October 2022 (Tuesday)			
12	Meeting with AREAN Project Manager and AREAN Project Finance Officer	PMU	In person
26 October 2022 (Wednesday)			
13	Meeting with Treasury Officer	PMCU	In person
3 November 2022 (Thursday)			

#	Activity	Stakeholder involved	Place
14	Meeting with Director, Department of Environment & GEF Focal point	Department of Environment	In person
4 November 2022 (Friday)			
15	Discussion of Project	UNDP and PMU	Virtual via Zoom meeting
14 December 2022 (Wednesday)			
16	Discussion of Project	UNDP and PMU	Virtual via Zoom meeting
10 January 2023 (Tuesday)			
17	Discussion of Project	UNDP	Virtual via Zoom meeting
13 January 2023 (Friday)			
18	Discussion of Project	PMU	Virtual via Zoom meeting
19 January 2023 (Thursday)			
19	Debrief of meetings	UNDP	Virtual via Zoom meeting

Total number of meetings conducted: 19

APPENDIX C – LIST OF PERSONS INTERVIEWED

This is a listing of persons contacted in Niue ad Samoa (unless otherwise noted) during the Mid-Term Review Period only. The Evaluation Team regrets any omissions to this list.

1. Ms. Verena Linneweber, Deputy Resident Representative, UNDP MCO for Cook Islands, Niue, Samoa and Tokelau;

2. Mr. Aussie Simanu, Assistant Resident Representative (Environment and Climate Change), UNDP MCO for Cook Islands, Niue, Samoa and Tokelau;

3. Mr. Jeffery Leung Wai, M&E Officer, Samoa MCO;

4. Ms. Pilisita Leota, M&E Officer, Samoa MCO;

5. Mr. Manuel Soriano, Regional Technical Advisor, UNDP Regional Hub Bangkok;

6. Ms. Felicia Pihigia, National Project Director, PMCU;

7. Mr. Andre Siohane, Interim Chair of the Project Board, Former Director General of MoI and current Government of Niue Regulator;

8. Mr. Daniel Makaia, AREAN Project Manager;

9. Mr. Brandon Kulatea, Head of NPC;

10. Mr. Logopati Seumanu, Technical Expert, AREAN Project;

11. Mr. Clinton Chapman, Director, Utilities;

12. Ms. Hannah, AREAN Project Finance Officer;

13. Ms. Etaena Poihega, Treasury Officer, PMCU;

14. Ms. Hade Talagi, Director, Department of Environment and GEF Focal point.

APPENDIX D – LIST OF DOCUMENTS REVIEWED

1. UNDP "Accelerating Renewable Energy and Energy Efficiency Applications in Niue" (AREAN) Project Document;

2. 2021 and 2022 PIR for AREAN Project;

3. AREAN Progress Reports for Q4 2019, Q1 2020, Q3 2020, Q4 2020, Q1 2021, Q2 2021, Q3 2021, Q4 2021, Q3 2022, Q4 2022;

4. AREAN Project "Transformer Assessment Report", by Mr. Lou Piupuhi, October 2020;

5. Report on "RE (Renewable Energy) & EE (Energy Efficiency) (Niue Island)".

APPENDIX E – GEF-7 CORE INDICATOR WORKSHEET

[PIMS Number: 6037] [Country: Niue]

CORE INDICATOR 6: GREENHOUSE GAS EMISSIONS MITIGATED (METRIC TONS OF CARBON DIOXIDE EQUIVALENT)

GHG emission type	Metric tons CO_2-eq (expected at PIF)	Metric tons CO_2-eq (expected at CEO ER)	Metric tons CO_2-eq (expected at MTR)	Metric tons CO_2-eq (expected at TE)
Lifetime direct project GHG emissions mitigated	Refer to footnote (*)	64,357	127	N/A
Lifetime direct post-project emissions mitigated	Refer to footnote (*)	35,277	152	N/A
Lifetime indirect GHG emissions mitigated	Refer to footnote (*)	12,595**	N/A	N/A

**Total direct and indirect GHG emission reductions = 110,200 tons CO2*

***CO2 emission reductions during influence period (top-down approach, CF = 1.0*

6.1 Carbon sequestered or emissions avoided in the sector of Agriculture, Forestry and Other Land Use

GHG emission type	Ha (expected at PIF)	Metric tons CO_2-eq (expected at PIF)	Ha (expected at CEO ER)	Metric tons CO_2-eq (expected at CEO ER)	Ha (expected at MTR)	Metric tons CO_2-eq (expected at MTR)	Ha (expected at TE)	Metric tons CO_2-eq (expected at TE)
Lifetime direct project GHG emissions mitigated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lifetime direct post-project emissions mitigated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lifetime indirect GHG emissions mitigated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anticipated year	---		---		---		---	

6.2 Emissions avoided

GHG emission type	Metric tons CO_2-eq (expected at PIF)	Metric tons CO_2-eq (expected at CEO ER)	Metric tons CO_2-eq (expected at MTR)	Metric tons CO_2-eq (expected at TE)
Lifetime direct project GHG emissions mitigated	Refer to footnote (*)	64,357	127	N/A
Lifetime direct post-project emissions mitigated	Refer to footnote (*)	35,277	152	N/A
Lifetime indirect GHG emissions mitigated	Refer to footnote (*)	12,595**	N/A	N/A
Anticipated year		2050		

**Total direct and indirect GHG emission reductions = 110,200 tons CO2*

***CO2 emission reductions during influence period (top-down approach, CF = 1.0*

6.3 Energy saved (megajoules)

Type of Intervention	MJ (expected at PIF)	MJ (expected at CEO ER)	MJ (achieved at MTR)	MJ (achieved at TE)
Increased RE-based power generation and Increased application of EE technologies	360mj	$1{,}454 \cdot 10^6$	436mj	N/A

Add rows as needed.

6.4 Increase in installed renewable energy capacity per technology (megawatts).

Type of Renewable Energy	MW (expected at PIF)	MW (expected at CEO ER)	MW (achieved at MTR)	MW (achieved at TE)
solar photovoltaic, and storage	2.6	2.543	3.2	N/A

CORE INDICATOR 11: NUMBER OF DIRECT BENEFICIARIES DISAGGREGATED BY GENDER AS CO-BENEFIT OF GEF INVESTMENT

	Total number (expected at PIF)	Total number (expected at CEO ER)	Total number (achieved at MTR)	Total number (achieved at TE)
Women	N/A	**Entire Female Population**	N/A	N/A
Men	N/A	**Entire Male Population**	N/A	N/A
Total	N/A	Entire Population of Niue	N/A	N/A

APPENDIX F – PROJECT RESULTS FRAMEWORK FOR AREAN PROJECT FROM AUGUST 2019

No changes were made in this PRF with the assumption of a Project extension of 24 months to enable to the PMU to work towards closer achievement of the objective level targets.

This project will contribute to the following Sustainable Development Goal (s): Directly: SDG 7 (Affordable and Clean Energy); Indirectly: SDG 1, 2 SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure).
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: *UN Pacific Strategy 2018-2022*: Outcome 1 – Climate Change, Disaster Resilience and Environmental Protection; *UNDP Sub-Regional Programme Document 2018-2022*: Outcome 1 – By year 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened.
This project will be linked to the following output of the UNDP Strategic Plan: Output 1.4: Scaled up action on climate change adaptation and mitigation cross sectors which is funded and implemented. Output 1.5: Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
Project Goal: Improved energy consumption index and reduced annual growth rate of GHG emissions in the country's energy supply and energy end-use sectors.	Reduction in the overall national energy utilization intensity (toe[37]/1,000 US$ GDP[38])	0.109	0.095	0.089	Annual energy supply and consumption reports submitted by relevant GoN entities, NPC, NBF, DoU-MoI, and the Treasury Department Project M&E reports	Continuous commitment of GoN in efforts to achieve the NiSERM targets irrespective of which party is in power
	Cumulative GHG emission reduction[39] from fossil fuel utilization, tons CO2	0	4,108	9,242[40]		

[37] Calculation of tons of Oil Equivalent (toe): 1) Amount of solar PV electricity (kWh) is considered as electricity produced from diesel power generation. The amount of diesel fuel (liters) used to generate this amount of electricity is calculated and then converted into toe; and 2) the toe value is added to the rest of the country's energy consumption (toe), i.e., energy consumption in all other sectors, except from solar PV).

[38] GDP data were available for year 2003 and year 2012. These two values have been used to determine the average GDP growth rate over this period, which was 6.2% (CIA gave the same 6.2% GDP growth rate also for the period prior to 2003). The assumption made is that GDP will continue to grow at the same rate for the next few years.

[39] Since the RE and EE targets will be fully achieved by 2025, and the solar PV installations have a duration of ~25 years, the cumulative GHG emission reductions over the lifetime of the equipment acquired will continue well past the end of AREAN implementation. Annex L shows these estimates in detail. By the end of all equipment lifetime the estimated cumulative GHG emission reductions will be 99,633 tCO2.

[40] In line with the plan to achieve all the NiSERM targets, the GoN, with the cooperation of NZHC, will implement new RE-based power generation projects during the AREAN implementation period. The estimated GHG emission reduction (631 tons CO2) from such projects is included in this EOP target.

Project Objective: Enabling the achievement of low carbon energy access, sustainable energy, and green growth targets of Niue	Cumulative fossil fuel savings[41] due to sustainable energy and low carbon interventions implemented, toe	0	1,361	3,281	Annual energy supply and consumption reports submitted by relevant entities, NPC, NBF, DoU-MoI and the Treasury Department Project M&E and activity reports Trade and commerce reports	Realization of committed co-financing from the national government in the implementation of project activities and monitoring systems
	% RE electricity production[42]	1.8%	64%	73%		
	No. of new jobs created in the application of sustainable energy and LC technologies and techniques in the energy supply and energy end-use sectors in Niue[43]	0	3	8		
Outcome: 1 Improved policy and regulatory frameworks in the application of energy efficiency and renewable energy technologies in the energy end-use sectors.	No. of approved and enforced RE and EC&EE policies, and associated guidance and implementing rules and regulations	0	2	2	Documents on RE and EC&EE policies, regulations, and energy standards Annual reports from DoU-MoI, NPC, and Bulk Fuels Project M&E and activity reports	Full and continuous commitment and support of the national government in the implementation of energy policies and regulations in the energy and end-use sectors
	No. of formulated and approved policies and regulations incorporated in the country's Energy Act	0	2	2[44]		

[41] Similarly, to the GHG emission reductions, also the fuel savings will continue well past the project implementation, due to the long lifetime of the equipment acquired.

[42] NZHC has indicated a very aggressive implementation strategy with the installation of most of the solar PV power capacity to achieve 80% generation completed by mid-term; additional PV systems have been considered after the completion of the 2 NZ projects to achieve the NiSERM target, as pledged by the NZHC.

[43] Job creation will continue past the completion of AREAN implementation, since the benefits of the activities that will lead to the creation of a RE/EE market will continue past project completion

[44] Review of the Energy Act will be completed by mid-term, therefore there will be no change for the end of project target.

Outcome 2: Effective enforcement of plans, policies and regulations, and implementation of programs/projects on the application of climate resilient and low carbon technologies in the end-use sectors	No. of sectoral integrated development plans that are implemented and managed through the established and adopted integrated institutional mechanisms	0	1	2	Documents on the institutional mechanisms Documents on low carbon development processes Annual Reports on the sectoral integrated development plan implementation Project M&E and activity reports	Continuous commitment and support by the national government, private sector and public, in general on the successfully implemented institutional arrangements even after the AREAN project completion
	No. of low carbon development initiatives facilitated by adopted and enforced institutional arrangements mentioned in Indicator 1	0	2	4		
Outcome 3: Increased availability of, and access to, financing for sustainable energy, energy access and low carbon development initiatives in the energy supply and demand sectors	No. of developed and recommended financing schemes/mechanisms with Niue Development Bank for supporting climate resilient and low carbon development initiatives in the country	0	1	2	Documents on the development process for the financial schemes Annual Reports on the planned and implemented low carbon development projects that are financed through the adopted financing scheme(s) Project M&E and activity reports	Continuous commitment and support by the national government and financial sector on implementation of the adopted financing schemes.
	No. of small-scale EE projects and RE technology projects financed either through the adopted financing scheme; or by private sector investment	0	2	6		
	No. of recommended finance/fiscal policies for supporting initiatives on LC development	0	2	2[45]		

[45] In order to maximize the benefits of the fiscal/financial policies and incentives, they will be designed and implemented by mid-term.

Outcome 4: Climate resilient and low carbon techniques and practices adopted and implemented in the energy supply and energy end-use sectors	No. of completed feasibility assessments conducted for planned energy-integrated socio-economic development activities that feature RE and EE technology applications	0	2	4	RE/EE technology projects feasibility assessment reports Project M&E and activity reports	Consumers and the private sector fully support and commit to the feasible replication of successful results of the demo projects
Outcome 5: Enhanced confidence in the viability of climate resilient and low carbon technology applications in the energy supply and demand sectors	Cumulative amount of energy savings from the successfully installed and operational demonstrations (including replications) of sustainable energy and low carbon technology applications, toe[46]	0	0	368	Demo RE-based electricity generation and low carbon technology application project profiles Performance and evaluation reports of the demo projects Project M&E and activity reports	As per schedule implementation and completion of demo projects Consumers and the private sector fully support and commit to the feasible replication of successful results of the demo projects
	No. of RE and EE technologies application projects designed and financed for implementation as influenced by the results and outcomes of the demonstrations	0	1[47]	5		
Outcome 6 Enhanced levels of awareness and attitude towards climate resilient and low carbon development in	Incremental no. of energy consumers (e.g., households) that will utilize EE appliances and RE-based energy generating and consuming equipment acquired through AREAN initiatives	0	40	160[48]	Survey of energy consumption of consumers (e.g., household energy survey) Business registrations of local technical and engineering service providers that are working	Continuous commitment and support on sustainable energy and low carbon development by the national government

[46] Demos will be completed during the second half of AREAN and their benefits will largely be achieved after project completion; similarly, replications (see Table L.6) will be implemented after the end of AREAN.

[47] Completion of demo activities will come after the completion of feasibility studies and it will take long time to be completed. Based on the demo projects described in Annex L only one demo (the completion of the high energy efficiency demonstration building) will be completed by mid-term, all other demos will be completed by end of project.

[48] This represents one third of Niue's ~480 households (it is estimated that just over 50% of the total households have very low efficiency appliances; therefore, AREAN aims to involve about two thirds of the target households).

the energy supply and energy end use sectors	No. of local firms that can capably provide technical, engineering and maintenance services for sustainable energy and low carbon technology application projects	0	1	3	on low carbon technology projects Project M&E and activity reports	

APPENDIX G – RESPONSES TO COMMENTS RECEIVED ON DRAFT MTR REPORT

NOT UPLOADED – INTERNAL DOCUMENT

APPENDIX H – EVALUATION CONSULTANT AGREEMENT FORM

Evaluator 1:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact during the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings, and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated.

Evaluation Consultant Agreement Form[37]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Roland Wong

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *Surrey, BC, Canada* on *31 March 2023*

[37] www.unevaluation.org/unegcodeofconduct

Evaluator 2:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact during the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings, and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated.

Evaluation Consultant Agreement Form[38]

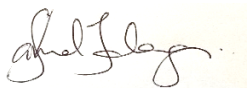
Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: __Jamal Veidreyaki_____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *Niue* on *31 March 2023*



[38] www.unevaluation.org/unegcodeofconduct

APPENDIX I – MTR FINAL REPORT CLEARANCE FORM

Midterm Review Report Reviewed and Cleared By:

Commissioning Unit (M&E Focal Point)

Name: _____

Signature: _____ Date: _____

Regional Technical Advisor (Nature, Climate and Energy)

Name: _____

Signature: _____ Date: _____