

GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title

Niue Infrastructure, Ecosystems and Communities Integrated Project (Niue IECI)

Region	GEF Project ID
Asia	12283
Country(ies)	Type of Project
Niue	FSP
GEF Agency(ies):	GEF Agency ID
UNDP	10481
CI	10481
Executing Partner	Executing Partner Type
Ministry of Natural Resources - Niue MNR	Government
GEF Focal Area (s)	Submission Date
Multi Focal Area	2/17/2026

Project Sector (CCM Only)

Mixed & Others

Taxonomy

Influencing models, Strengthen institutional capacity and decision-making, Demonstrate innovative approaches, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Stakeholders, Indigenous Peoples, Private Sector, Individuals/Entrepreneurs, SMEs, Beneficiaries, Local Communities, Civil Society, Community Based Organization, Non-Governmental Organization, Type of Engagement, Information Dissemination, Consultation, Participation, Partnership, Communications, Awareness Raising, Behavior change, Education, Public Campaigns, Capacity, Knowledge and Research, Capacity Development, Knowledge Generation, Training, Course, Workshop, Professional Development, Seminar, Adaptive management, Indicators to measure change, Knowledge Exchange, South-South, Field Visit, Peer-to-Peer, Twinning, Gender Equality, Gender Mainstreaming, Women groups, Gender-sensitive indicators, Sex-disaggregated indicators, Gender results areas, Access to benefits and services, Participation and leadership, Knowledge Generation and Exchange, Access and control over natural resources, Focal Areas, Sustainable Development Goals, Biodiversity, Protected Areas and Landscapes, Terrestrial Protected Areas, Community Based Natural Resource Mngt, Mainstreaming, Tourism, Infrastructure, Species, Invasive Alien Species, Mangroves, Climate Change, Climate Change Adaptation, Climate finance, Disaster risk management, Small Island Developing States, Sea-level rise, Climate resilience, Climate information, Ecosystem-based Adaptation, Adaptation Tech Transfer, Mainstreaming adaptation, Community-based adaptation, Private sector, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Technology Transfer, Renewable Energy, Land Degradation, Sustainable Land Management, Ecosystem Approach, Restoration and Rehabilitation of Degraded Lands, Community-Based Natural Resource Management, Income Generating Activities, Coastal and Marine Protected Areas, International Waters, Large Marine Ecosystems, Marine Protected Area

Type of Trust Fund	Project Duration (Months)
MTF	60
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
8,031,759.00	0.00

Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
749,581.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
8,781,340.00	27,188,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
200,000.00	18,660.00
PPG total amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
218,660.00	9,000,000.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”. (max. 250 words, approximately 1/2 page)

Niue is highly vulnerable to climate change impacts, including intensified cyclones, coastal erosion, sea-level rise, and disruptions to critical water and energy services. These risks are compounded by Niue’s geographic isolation, dependence on imported fossil fuels, climate-sensitive key economic sectors (e.g. tourism), and limited institutional and technical capacity to plan, deliver, and sustain climate-resilient investments. Degraded coastal ecosystems further weaken natural protection, increasing exposure of communities, infrastructure, and livelihoods to climate shocks. At the same time, Niue hosts globally significant terrestrial and marine biodiversity, including one of the world’s largest fully protected Exclusive Economic Zones (EEZ) and extensive marine protected areas, which are increasingly threatened by climate change, invasive species and habitat degradation.

The **NIUE IECl**- Niue Infrastructure, Ecosystems and Communities Integrated Project (Niue IECl) aims to reduce GHG emissions and strengthen Niue’s climate resilience and biodiversity protection through an innovative and integrated approach that links risk-informed governance, low-emission infrastructure, nature-based solutions, sustainable long-term financing, and strengthened institutional capacity and learning. The project will be implemented nationwide, with a particular focus on vulnerable coastal communities, public infrastructure, tourism-related facilities, and priority coastal ecosystems.

This multi-trust fund project will be delivered through four mutually reinforcing components. First, it will strengthen climate risk, energy, and biodiversity governance by generating high-resolution risk information and embedding it into planning, policies, and investment prioritization. Second, it will establish climate-resilient, multi-purpose infrastructure such as emergency shelters with integrated renewable energy and water systems, to ensure service continuity, support tourism resilience, and reduce reliance on fossil fuels. Third, it will restore vulnerable coastal terraces and ecosystems using nature-based solutions, supported by community stewardship and traditional knowledge. Fourth, it will establish and strengthen long-term sustainable financing for marine protected areas through the NOW Trust, ensuring their effective management, sustained ecosystem restoration, and the protection of critical habitats and biodiversity. Fifth, it will institutionalize monitoring, safeguards, gender equality, learning, and knowledge systems to enable adaptive management and long-term sustainability. Together, these components simultaneously deliver climate change adaptation and climate change mitigation outcomes through resilient infrastructure, low-

emission energy systems, and ecosystem-based solutions, while generating global environmental benefits through biodiversity conservation and improved ecosystem integrity.

The project is transformative in that it shifts Niue from fragmented, reactive responses to a systems-based resilience model that integrates climate and biodiversity ambitions for infrastructure, ecosystems, governance, and communities. An estimated 1,142 people (560 men / 582 women) which is 70% of Niue’s population will directly benefit from the project. The project will lead to 11,188 tCO₂e direct and indirect lifetime emission reductions. 60 hectares of coastal ecosystems will be restored and under improved practice as a result of the project. In addition, through a capital injection into the NOW Trust Fund, 31.8 million hectares will be placed under improved management.

The NIUE-IECI is aligned with Niue’s National Strategic Development Plan (NSDP 2016–2026), its Nationally Determined Contribution (NDC), the Niue Energy Road Map (NERM), the National Climate Change Policy, and the National Biodiversity Strategy and Action Plan (NBSAP), and translates these strategies into integrated, risk-informed governance, climate-resilient low-emission infrastructure, services, and ecosystem-based adaptation actions. The project also directly contributes to global biodiversity targets, including large-scale marine conservation, ecosystem restoration, and the long-term financing of protected areas.

Indicative Project Overview

Project Objective

To enhance Niue’s climate change mitigation and adaptation and biodiversity protection through low-emission infrastructure, nature-based solutions, and sustainable long-term financing.

Project Components

1. Climate risk governance, planning and enabling environment

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
184,012.00	328,800.00

Outcome:

1. Climate and energy risk information is institutionalized across national and local planning systems, enabling coordinated, evidence-based governance and the prioritization of low carbon and climate-resilient infrastructure and ecosystem conservation restoration and adaptation.

Output:

1.1. High-resolution climate, energy risk and biodiversity information developed and made accessible for national decision-making

1.2 Institutional systems, policies, and governance mechanisms strengthened to systematically apply climate-risk and biodiversity information

1.3 Technical capacity and planning tools enhanced for risk-informed and low-carbon infrastructure and informed decision-making

1.4 Risk-informed investment planning and resource mobilization strengthened to prioritize climate-resilient and low-carbon development respectful of biodiversity and natural values

1.5 Integrated landscape and seascape planning implemented to ensure development is climate-resilient and aligned with biodiversity conservation and natural values

1. Climate risk governance, planning and enabling environment

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
84,011.00	328,800.00

Outcome:

1. Climate and energy risk information is institutionalized across national and local planning systems, enabling coordinated, evidence-based governance and the prioritization of low carbon and climate-resilient infrastructure and ecosystem conservation restoration and adaptation.

Output:

1.1. High-resolution climate, energy risk and biodiversity information developed and made accessible for national decision-making

1.2 Institutional systems, policies, and governance mechanisms strengthened to systematically apply climate-risk and biodiversity information

1.3 Technical capacity and planning tools enhanced for risk-informed and low-carbon infrastructure and informed decision-making

1.4 Risk-informed investment planning and resource mobilization strengthened to prioritize climate-resilient and low-carbon development respectful of biodiversity and natural values

1.5 Integrated landscape and seascape planning implemented to ensure development is climate-resilient and aligned with biodiversity conservation and natural values

2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
400,000.00	350,000.00

Outcome:

2. Low-carbon and climate-resilient, multi-purpose water, energy, and shelter infrastructure is established in a landscape approach and conditioned on biodiversity sensitivity assessments and locally managed to ensure continuity of essential services during climate shocks while strengthening tourism resilience and community livelihoods.

Output:

2.2 Local operation, maintenance and governance capacity strengthened for low-carbon and resilient infrastructure

2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
100,000.00	350,000.00

Outcome:

2. Low-carbon and climate-resilient, multi-purpose water, energy, and shelter infrastructure is established in a landscape approach and conditioned on biodiversity sensitivity assessments and locally managed to ensure continuity of essential services during climate shocks while strengthening tourism resilience and community livelihoods.

Output:

2.2 Local operation, maintenance and governance capacity strengthened for low-carbon and resilient infrastructure

2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
1,200,000.00	5,850,000.00

Outcome:

2. Low-carbon and climate-resilient, multi-purpose water, energy, and shelter infrastructure is established in a landscape approach and conditioned on biodiversity sensitivity assessments and locally managed to ensure continuity of essential services during climate shocks while strengthening tourism resilience and community livelihoods.

Output:

2.1 Low—carbon and climate-resilient, multi-purpose shelter, water and energy infrastructure established and operational

2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity

Component Type	Trust Fund
Investment	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
1,200,000.00	5,850,000.00

Outcome:

2. Low-carbon and climate-resilient, multi-purpose water, energy, and shelter infrastructure is established in a landscape approach and conditioned on biodiversity sensitivity assessments and locally managed to ensure continuity of essential services during climate shocks while strengthening tourism resilience and community livelihoods.

Output:

2.1 Low—carbon and climate-resilient, multi-purpose shelter, water and energy infrastructure established and operational

3. Ecosystem conservation, adaptation and natural GHG emission removal

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
250,000.00	1,000,000.00

Outcome:

3. Coastal terraces and ecosystems restored and sustainably managed to improve the status, integrity, and resilience of globally significant biodiversity, while delivering climate adaptation and mitigation benefits.

Output:

3.1 Vulnerable coastal terraces and ecosystems assessed and prioritized for ecosystem-based restoration in line with biodiversity conservation priorities

3.3 Strengthened existing village council structures for community engagement and stewardship in nature-based solutions

3.4 Institutionalized capacity for sustainable ecosystem-based restoration and management

3. Ecosystem conservation, adaptation and natural GHG emission removal

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
500,000.00	1,000,000.00

Outcome:

3. Coastal terraces and ecosystems restored and sustainably managed to improve the status, integrity, and resilience of globally significant biodiversity, while delivering climate adaptation and mitigation benefits.

Output:

3.1 Vulnerable coastal terraces and ecosystems assessed and prioritized for ecosystem-based restoration in line with biodiversity conservation priorities

3.3 Strengthened existing village council structures for community engagement and stewardship in nature-based solutions

3.4 Institutionalized capacity for sustainable ecosystem-based restoration and management

3. Ecosystem conservation, adaptation and natural GHG emission removal

Component Type	Trust Fund
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Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
250,000.00	1,000,000.00

Outcome:

3. Coastal terraces and ecosystems restored and sustainably managed to improve the status, integrity, and resilience of globally significant biodiversity, while delivering climate adaptation and mitigation benefits.

Output:

3.2 Sustainable land management practices implemented to reduce carbon loss and climate risks

3. Ecosystem conservation, adaptation and natural GHG emission removal

Component Type	Trust Fund
Investment	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
500,000.00	1,000,000.00

Outcome:

3. Coastal terraces and ecosystems restored and sustainably managed to improve the status, integrity, and resilience of globally significant biodiversity, while delivering climate adaptation and mitigation benefits.

Output:

3.2 Sustainable land management practices implemented to reduce carbon loss and climate risks

4. Establish and strengthen long-term institutional capability and sustainable financing for the Niue Nukutuluea Multiple-Use Marine Park and Moana Mahu through the NOW Trust.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
239,728.00	669,473.00

Outcome:

4. Lasting conservation and financial sustainability of the Niue Nukutuluea Multiple-Use Marine Park and Niue Moana Mahua advanced.

Output:

4.1 Complete Due diligence on Niue & Ocean Wide Trust (NOW) completed and grant agreement negotiated and signed

4.3 Financial Monitoring of the NOW Trust Fund completed once annually

4.4 NOW Trust Fund investment management capacity is optimized to ensure regular oversight of investment performance, as well as an appropriate risk strategy and balanced diversification of its investment portfolio, ensuring the latter is socially and environmentally responsible

4.5 Fund Capitalization Strategy updated with additional donors identified

4.6 Management effectiveness of marine protected areas strengthened through explicit management strategies and improvement of practices

4. Establish and strengthen long-term institutional capability and sustainable financing for the Niue Nukutuluea Multiple-Use Marine Park and Moana Mahu through the NOW Trust.

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
2,445,906.00	6,830,527.00

Outcome:

4. Lasting conservation and financial sustainability of the Niue Nukutuluea Multiple-Use Marine Park and Niue Moana Mahua advanced.

Output:

4.2 The Niue & Ocean Wide Trust (NOW) is capitalized with 2.5M in GEF contributions

5. Monitoring, learning and Inclusive Knowledge Systems for Climate Resilience

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
175,776.00	328,800.00

Outcome:

5. Monitoring, learning, safeguards, and knowledge systems are institutionalized to support adaptive management, inclusive implementation, and sustained low-carbon, climate resilience outcomes at local, national, and regional levels.

Output:

5.1 Integrated monitoring and evaluation systems established to support adaptive management

5.2 Inclusive learning, feedback and awareness mechanisms strengthened

5.3 Knowledge management, knowledge exchange and capacity development systems strengthened

5. Monitoring, learning and Inclusive Knowledge Systems for Climate Resilience

Component Type	Trust Fund
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Technical Assistance	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
75,776.00	328,800.00

Outcome:

5. Monitoring, learning, safeguards, and knowledge systems are institutionalized to support adaptive management, inclusive implementation, and sustained low-carbon, climate resilience outcomes at local, national, and regional levels.

Output:

5.1 Integrated monitoring and evaluation systems established to support adaptive management

5.2 Inclusive learning, feedback and awareness mechanisms strengthened

5.3 Knowledge management, knowledge exchange and capacity development systems strengthened

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
79,942.00	164,400.00

Outcome:

Project results are tracked, challenges identified and necessary adjustment made

Output:

ME1 Project M&E system designed and operational

ME2 Project evaluations completed on time to support project delivery and knowledge sharing

ME3 Monitoring Reports submitted on time to the Implementing Agency and GEFSEC

M&E

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
79,940.00	164,400.00

Outcome:

Project results are tracked, challenges identified and necessary adjustment made

Output:

ME1 Project M&E system designed and operational

ME2 Project evaluations completed on time to support project delivery and knowledge sharing

ME3 Monitoring Reports submitted on time to the Implementing Agency and GEFSEC

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
1. Climate risk governance, planning and enabling environment	184,012.00	328,800.00
1. Climate risk governance, planning and enabling environment	84,011.00	328,800.00
2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity	400,000.00	350,000.00
2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity	100,000.00	350,000.00
2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity	1,200,000.00	5,850,000.00
2. Low –carbon and climate-resilient infrastructure, sustainable tourism and community capacity	1,200,000.00	5,850,000.00
3. Ecosystem conservation, adaptation and natural GHG emission removal	250,000.00	1,000,000.00
3. Ecosystem conservation, adaptation and natural GHG emission removal	500,000.00	1,000,000.00
3. Ecosystem conservation, adaptation and natural GHG emission removal	250,000.00	1,000,000.00
3. Ecosystem conservation, adaptation and natural GHG emission removal	500,000.00	1,000,000.00
4. Establish and strengthen long-term institutional capability and sustainable financing for the Niue Nukutuluea Multiple-Use Marine Park and Moana Mahu through the NOW Trust.	239,728.00	669,473.00
4. Establish and strengthen long-term institutional capability and sustainable financing for the Niue Nukutuluea Multiple-Use Marine Park and Moana Mahu through the NOW Trust.	2,445,906.00	6,830,527.00
5. Monitoring, learning and Inclusive Knowledge Systems for Climate Resilience	175,776.00	328,800.00
5. Monitoring, learning and Inclusive Knowledge Systems for Climate Resilience	75,776.00	328,800.00
M&E	79,942.00	164,400.00
M&E	79,940.00	164,400.00
Subtotal	7,765,091.00	25,544,000.00

Project Management Cost	125,000.00	822,000.00
Project Management Cost	141,668.00	822,000.00
Total Project Cost (\$)	8,031,759.00	27,188,000.00

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

1. Climate and project rationale and key drivers of Niue's vulnerability

Niue is a small, self-governing raised coral island nation in free association with New Zealand in the South Pacific, characterized by geographic isolation, a very small resident population (1,681 people as per 2022 census^[1]), a narrow economic base, and high exposure to climate hazards. Niue has a marine territory 1,200 times larger than its land mass. Niue's 321,018 km² exclusive economic zone (EEZ) has largely been unexploited and serves as a sanctuary for many rare and endangered shark, whale, dolphin, ray, and turtle species and the endemic Katuali or flat-tail sea snake.^[2] Niue's entire EEZ is under a comprehensive Marine Spatial Management Plan and by law designated as a Multiple-use Marine Park (Nukutuluea Marine Park) inclusive of 40% (127,000 sq/km) as a large scale marine protected area (no take), called Niue Moana Mahu. This is supported by a sustainable wholistic financing mechanism called the Niue Ocean Wide Trust (NOW Trust) with a unique financing instrument called an Ocean Conservation Commitment in addition to traditional forms of capitalization.

Residents live in coastal villages on the fertile coastal strip concentrated around the western coast and capital, Alofi.^[3] The economy is limited by geographic isolation, scarce natural resources, and a small domestic market, and is heavily dependent on public sector activity, tourism, external aid, and remittances, with assistance from New Zealand comprising a major source of both fiscal support and wages.^[4] Key livelihood activities include subsistence agriculture, small-scale livestock keeping, artisanal fishing, and an emerging eco-tourism sector that leverages Niue's unique limestone cliffs, coral reefs, and natural environment. Although tourism receipts remain modest relative to total GDP, eco-tourism remains a key priority for Niue.^[5]

With limited technical and human resource capacity in government and strong exposure of infrastructure and services to climate hazards, there is a recognized need for enhanced planning, technical skills, and institutional strengthening to support resilient development pathways across sectors. [6]⁶

Niue continues to face the serious challenge of outward migration, which has driven a steady population decline since 1979 and significantly constrained the country's social and economic development. The small population and limited labor force, combined with high transport and infrastructure costs due to geographic isolation, restrict economic diversification and service delivery. These structural constraints are further compounded by poor land quality and increasing vulnerability to natural hazards and climate-related disasters, placing additional pressure on livelihoods and public resources. Within this context, two groups are particularly vulnerable:

- youth, who face limited economic and livelihood opportunities making out-migration especially to New Zealand one of the few viable pathways for education and employment;
- women, for whom the lack of reliable gender-disaggregated data and gender-focused research, together with the need for strengthened legislation and institutional frameworks, continues to limit progress toward gender equality and the full realization of women's rights [7]⁷

As a raised coral atoll with a long and highly exposed coastline, Niue faces increasing risks from cyclones, storm surges, coastal erosion, prolonged dry periods, and saltwater intrusion. Climate change is amplifying these hazards, increasing both their intensity and unpredictability, and placing growing pressure on ecosystems, infrastructure, public services, and livelihoods: [8]⁸

Rising Temperatures and Extreme Heat

Observed air temperatures in Niue have increased significantly since the 1950s, with mean annual temperatures rising by approximately 0.16 °C per decade over the period 1951–2020. Warming has occurred across all seasons, with particularly strong increases in minimum temperatures, and the number of hot days has more than doubled in recent years compared to earlier decades. [9]⁹ Climate projections indicate continued warming under all emission scenarios. In a low emission scenario (RCP 2.5), temperatures are expected to increase by 0.6°C (0.3-1.0 10-90 percentile uncertainty range) by 2050 and 2070. In a high emission scenario (RCP 8.5), temperatures are expected to increase by 1.2°C (0.8-2.0 10-90 percentile uncertainty range) by 2050 and by 1.9°C (1.3-3.0 10-90 percentile uncertainty range) by 2070. [10]¹⁰ This will lead to higher cooling demand, increased heat stress on communities, and reduced efficiency and reliability of energy and water systems.

Rainfall Variability, Drought Risk, and Extreme Precipitation

Historical records show high interannual variability in rainfall, with annual totals ranging from approximately 800 mm to nearly 3,900 mm, strongly influenced by ENSO. [11]¹¹ While long-term trends in total annual rainfall are not statistically significant, climate projections suggest increased rainfall

variability, with more intense rainfall events interspersed with longer dry spells.^{[12]¹²} In a high emission scenario (RCP 8.5), annual rainfall is expected to increase by 1% (-14-13 10-90 percentile uncertainty range) by 2050 and by 4% (-16-32 10-90 percentile uncertainty range) by 2070.^{[13]¹³} Such patterns heighten risks of flooding, soil erosion, and freshwater stress, particularly for coastal communities dependent on rainwater harvesting. These dynamics underscore the need for integrated water-energy systems, resilient infrastructure design, and ecosystem-based measures to stabilize soils and regulate runoff.

Tropical Cyclones and Extreme Weather Events

Niue experiences an average of around 10 tropical cyclones per decade passing within its EEZ, with large interannual variability and several seasons recording multiple events.^{[14]¹⁴} While long-term trends in cyclone frequency remain uncertain, regional projections indicate an increase in the intensity of tropical cyclones, including stronger winds and heavier rainfall associated with extreme events.^{[15]¹⁵} Even in the absence of more frequent cyclones, higher intensity cyclone events significantly increase risks to infrastructure, energy systems, and coastal areas. This reinforces the need for cyclone-resilient infrastructure standards and natural protective buffers through ecosystem-based adaptation.

Sea-Level Rise, Coastal Inundation and Ocean Warming

Sea surface temperatures around Niue have increased at a rate of approximately 0.29 °C per decade since the early 1980s.^{[16]¹⁶} Warmer Ocean temperatures contribute to coral stress, ecosystem degradation, and changes in coastal dynamics, while also interacting with wave and storm surge impacts. Satellite observations indicate that sea level around Niue has risen by approximately 3–5 mm per year since 1993, exceeding the global average in parts of the EEZ.^{[17]¹⁷} In the RCP 4.5 scenario, sea levels are expected to increase by 0.36m [0.27-0.48] in 2070 and 0.57m [0.42-0.77] in 2100. In the RCP 8.5 scenario, sea levels are expected to increase by 0.47m [0.36-0.62] in 2070 and 0.88m [0.66-1.19] in 2100.^{[18]¹⁸} Rising mean sea levels increase the frequency and severity of coastal flooding, storm surge impacts, and saltwater intrusion, particularly during high-tide and extreme weather events. Future projections show continued sea-level rise under all scenarios, compounding risks to low-lying coastal terraces, infrastructure, and ecosystems. Extreme wave events, including 100-year return interval wave heights exceeding 13 m, pose increasing risks to exposed coastlines and infrastructure.^{[19]¹⁹} Together, these trends and projections underpin the importance of combining ecosystem restoration, resilient coastal planning, and risk-informed infrastructure investments to address compounding marine and coastal hazards.

Informed by these climate hazard trends and projections, Niue's key climate strategy documents including the NDC^{[20]²⁰} and the 2nd National Communication to the UNFCCC identify the following key climate vulnerabilities^{[21]²¹}:

Water insecurity (drought, rainfall variability, cyclones, sea level rise)

Niue has no surface water and relies entirely on groundwater lenses and rainwater harvesting. The main water supply in Niue comes from village tanks that are mainly charged by pumped groundwater. Depending on the location of the tank, houses are connected to either a gravity-fed or pressure (electric pumps) reticulation system.^{[22]²²} Electric pump reliant groundwater extraction and village-level distribution means that disruptions in electricity supply can directly interrupt water availability, creating a critical systems interdependency where “no power” effectively translates to “no water” in affected communities. Furthermore, higher temperatures increase evaporation, while more variable rainfall reduces reliable recharge. Droughts and intense cyclones damage pipelines and storage, and sea level rise increases saline intrusion into coastal aquifers, degrading water quality and availability for domestic, agricultural, and commercial use.

Food and nutritional insecurity (heat stress, rainfall variability, storms, ocean warming)

Subsistence agriculture and coastal fisheries are highly climate-sensitive. Extreme heat, dry spells, and intense rainfall reduce crop yields and soil moisture, while stronger winds damage tree crops. In fisheries, rising sea surface temperatures, ENSO variability, coral bleaching, and ocean acidification reduce fish stocks and damage habitats, undermining household food security and incomes.

Energy insecurity (heat, cyclones, storms, water stress, dependence on imported fossil fuels)

Niue remains highly dependent on diesel-based power generation. In 2022, only 2% of the total energy supply came from renewable energy, falling from 3% in 2017.^{[23]²³} In 2019, fuel imports accounted for up to 12% of GDP, placing significant pressure on trade balances and exposing the country’s economy to global price volatility.^{[24]²⁴} This dependence on imported fuel constrains fiscal space, increases electricity generation costs, and undermines the viability of long-term decarbonization and resilience strategies. The island is also increasingly exposed to the impacts of climate change and extreme weather, as seen in the severe storms of 2023–2024 that left Niue without power for several days. However, in recent years, Niue has made notable progress in expanding its renewable energy infrastructure, particularly solar PV and battery storage. Thanks to the GEF-funded and UNDP implemented Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN) project (GEF ID 9752), Niue significantly strengthened the resilience, reliability, and readiness of its power system during a critical phase of the energy transition through targeted infrastructure reinforcement which will help accommodate rising shares of renewable generation in line with Niue’s target of 80% renewable energy by 2025 as stipulated in the 2015 Niue Strategic Energy Road Map and the NDC 3.0.^{[25]²⁵} In line with this target, Niue is currently implementing Phase 2 of a NZD \$20.5 million renewable energy project (2024–2026), which includes a new 2.79 MW solar PV system, a 8.19 MWh BESS, and critical grid upgrades. These developments aim to reduce diesel consumption by up to 816,000 liters annually, avoiding approximately 22,200 tons of CO₂e annually.^{[26]²⁶} However, operational challenges persist, and to date most of the solar PV capacity existing in the country is either not operational or not connected to the grid due to concerns over grid stability. It thus remains uncertain how adding the new and relatively large solar PV installation will affect the grid.

Niue's energy policy environment has evolved steadily over the past two decades, shifting from a focus on access and reliability to prioritizing renewable energy, energy efficiency, and climate commitments. Key policies include the 2005 National Energy Policy and Action Plan, the 2015 Niue Strategic Energy Road Map with its 80% renewable energy target by 2025, and the 2021 Electric Power Supply and Energy Amendment Bill, which modernized the legal framework to support renewable energy integration, efficiency measures, and established the Niue Energy Authority. However, policy implementation is constrained by limited resources, technical capacity, and recent infrastructure setbacks. For example, the establishment of the Niue Energy Authority has been delayed and persisting unclear institutional roles and responsibilities within the energy sector hinder effective implementation and coordination of energy policies. Like many small island developing states, Niue's energy sector combines ambitious targets with a patchwork of (partially outdated) regulations and a limited pool of specialized staff. For example, the Electric Power Supply Act of 1960 still governs operations, and although the 2021 Electric Power Supply and Energy Amendment Bill created a Niue Energy Authority and modernized licensing, its implementing regulations, technical standards and enforcement procedures have not been developed. Market instruments are largely missing, there is no feed-in tariff, net-metering or standard power-purchase agreements, and the block tariff that does exist recovers only a fraction of real generation and O&M costs.

Finally, rising temperatures increase cooling demand, while cyclones and high-intensity storms threaten generation and distribution infrastructure. Climate-driven water shortages further raise energy needs for pumping and treatment, increasing dependence on imported fuels and exposing Niue to supply disruptions.

Coastal and infrastructure exposure (sea level rise, storm surge, cyclones)

Sea level rise, combined with cyclones and storm surges, contribute to shoreline erosion, inundation, and damage to coastal infrastructure and settlements.

Tourism vulnerability (storms, heat, coral bleaching)

Niue's tourism sector is exposed to cyclone damage, extreme rainfall, and heat, which increase repair costs, present high risk operating environments for growing the blue tourism economy, and deter visitors. Coral bleaching and biodiversity loss further reduce Niue's attractiveness as a nature-based destination, constraining diversification of livelihoods and economic growth. Given Niue's geographical structure as an exposed large raised coral atoll with no protecting outer reef, increased moderate storm surges present high risks to the blue economy (e.g. diving, whale watching, snorkeling, game fishing) being able to deploy and operate.

Biodiversity and ecosystem degradation (warming, acidification, droughts, storms)

Rising temperatures and rainfall variability increase invasive species, pests, and diseases, while ocean warming and acidification drive coral bleaching and marine species loss. Sea level rise and cyclones accelerate habitat destruction, weakening ecosystem services that underpin fisheries, coastal protection, and cultural identity. Niue's lower coastal terraces form a narrow transition zone between the uplifted reef platform and the ocean, characterized by shallow soils, high exposure to salt spray, wind, and periodic wave overtopping during storms and cyclones.^{[127](#)²⁷} Cyclones create opportunities that invasive species can exploit, resulting in a significant expansion of territory and invasions of ecosystems. Surveys of Niue after Cyclone Heta found that invasive plant species, already present on the island, had become more abundant

and had expanded their range before native flora could recover.^{[28]28} A total of 349 known alien species exist in Niue, of which the majority are flora species.^{[29]29} These terraces thus support fragmented and environmentally stressed vegetation, providing limited structural protection against coastal hazards and demonstrating a clear need for enhancement through targeted nature-based restoration. Degradation of coastal terrace vegetation not only reduces ecosystem resilience but also results in the loss of carbon sequestration potential. By improving vegetation cover and ecosystem management through nature-based approaches, the project will thus also ensure and enhance the long-term carbon removal function of coastal terraces while simultaneously strengthening resilience to climate impacts.

Under Niue’s Nationally Determine Contributions (NDCs) 3,0 Niue has amongst the highest commitments to Blue NDCs with clear complementarity to both biodiversity and climate action. For example, Niue has already committed 40% of its ocean jurisdiction to conservation, surpassing the 30x30 Kunming target.

Niue protects 100% of its exclusive economic zone (EEZ), which includes the Niue Moana Mahu no-take MPA, constituting 40% of the EEZ (12,700,000 hectares, ~50,000 sq miles). In 2022, Niue included its entire EEZ and territorial sea under a holistic management framework via the Nukutuluea Multiple-Use Marine Park. These designations are important to protecting Niue’s marine ecosystems and building long term nature positive blue economies that support ocean protection in perpetuity. However, this requires predictable long-term financing to build and retain the required the human, technical, institutional, and long-term funding efforts of this Small Island Developing State. With the establishment of the Niue Ocean (NOW Trust) and the launch of the Ocean Conservation Commitments Mechanism, Niue has made strides in establishing systems to support its conservation and resilient blue economy efforts. However, it requires full capitalization of the Trust to reach sustainable financing, for at least 20 years, and hopefully in perpetuity thus enabling both marine conservation and resilience efforts to go hand in hand.^{[30]30}

Disaster risk and loss and damage (cyclones, droughts)

Cyclone Heta in 2004 caused estimated damage at NZD 90 million and major non-economic losses.^{[31]31}

Taken together, these observed trends and projected changes demonstrate that Niue is already experiencing climate conditions beyond historical norms, with future hazards expected to intensify. Niue’s social, environmental, and economic systems are closely interconnected. Coastal ecosystems and terraces provide natural protection against erosion and storm impacts. Water and energy systems enable public services, emergency response, and tourism which plays a central role in the country’s economic activity, government revenue, and employment. Disruptions in one part of this system, such as damage to coastal ecosystems, power outages, or water shortages, rapidly cascade into wider social and economic impacts. Climate change therefore represents a systemic risk rather than a sector-specific challenge.

Key climate hazards and their corresponding scenario-based projections for the infrastructure design horizon planned under this project (25 years) are summarized in Table 1 below.

Table 1: Scenario-based climate projections for temperature, precipitation, cyclone intensity, and sea-level rise for the lifetime of the infrastructure (25 years) (median and 10-90 percentile uncertainty range in brackets)

	Climate Scenario
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Climate Hazard	RCP 2.6 (2050)	RCP 8.5 (2050)
Temperature increase compared to 1986-2005 (°C)	0.6 (0.3 to 1.0)	1.2 (0.8 to 2.0)
Annual precipitation deviation compared to 1986-2005 (%)	1 (-13 to 12)	1 (-14 to 13)
Cyclone intensity	Higher intensity (medium to high confidence), lower frequency (high confidence)	Higher intensity (medium to high confidence), lower frequency (high confidence)
Sea-level rise (meters)	0.22 (0.17-0.29)	0.28 (0.21-0.36)

Source: CSIRO and SPREP (2021)[\[32\]](#)³²

Underlying drivers of vulnerability include Niue’s small scale and remoteness, which limit economies of scale, increase transport and infrastructure costs, and constrain access to specialized technical expertise. Institutional capacity is thinly spread across government agencies and utilities, while long-term maintenance and monitoring systems remain underdeveloped. The economy is highly climate-sensitive, with tourism dependent on reliable water, energy, transport access, and healthy coastal and marine ecosystems. At the same time, demographic trends, including outward migration and reliance on diaspora support, place further pressure on local capacity for planning, implementation, and sustained asset management.

2. Likely future without the project

Without the proposed project, Niue’s climate response is expected to remain largely reactive, fragmented, and dependent on episodic external support. While important progress has been made in expanding renewable energy generation and strengthening parts of the policy framework, climate risk information is not yet systematically embedded in land-use planning, infrastructure design, or investment prioritization. Decision-making remains constrained by incomplete risk data, limited coordination across sectors, and the absence of standardized tools to translate climate information into practical planning and permitting decisions.

Critical infrastructure (e.g. energy, water, and community facilities) will remain exposed to extreme weather events and supply disruptions. Even as renewable energy capacity increases, system resilience will continue to be undermined by weak monitoring, limited redundancy and grid integration capacity, and insufficient local capacity for operation and maintenance. Water security risks, particularly during dry periods and post-disaster recovery, are likely to intensify.

At the same time, coastal terraces and ecosystems will continue to degrade under the combined pressures of climate change, invasive species, and prevailing land-use practices. This will progressively reduce natural coastal protection, increase erosion and damage during storms, and undermine biodiversity and ecosystem services that support tourism and community well-being.

The NOW trust has a capitalization target of \$18M and is currently ~41% capitalized at NZD \$13.2M (~USD \$7.7M). Without the GEF investment, the fund could remain under-operationalized/under-capitalized, and the trust is likely to face more difficulties to secure funding in an increasingly competitive fundraising space. The GEF investment would be the first multilateral contribution to the fund and would signal multilateral approval to further attract other contributions. Without the additional capital from this project, the planned activities of the fund, including compliance and enforcement efforts, and community engagement would likely be reduced.

Without stronger learning, monitoring, safeguards, and knowledge systems, lessons from past and ongoing investments will remain insufficiently captured and institutionalized. Gender and social inclusion risks may persist, and adaptive management will remain limited. Overall, Niue's vulnerability to climate shocks is expected to increase, with rising costs to government, communities, and the economy.

3. Prevailing barriers and underlying root causes

Niue's climate vulnerability is shaped by a set of interlinked barriers that reflect structural constraints typical of small island contexts and that collectively limit the country's ability to anticipate, absorb, and adapt to increasing climate risks.

- **Barrier 1: Weak climate-risk informed governance, planning and decision-making systems**

Decision-making in Niue is constrained by fragmented and incomplete data and instruments for mid- and long-term planning and decision making. For example, while some climate, hazard, and energy risk data and information exists, it is not consistently translated into decision-support tools that can guide planning, infrastructure design, or investment prioritization. Root causes include limited hazard mapping coverage, weak integration of climate and energy data, and the absence of accessible GIS-based tools to support evidence-based decisions across sectors.

Even where risk information is available, it is not systematically applied in land-use planning, infrastructure permitting, or public investment decisions. Processes remain siloed across institutions, and the use of climate risk information is not streamlined. Root causes include limited cross-sectoral coordination, the absence of standardized procedures and guidelines, and capacity constraints within planning and regulatory institutions.

Component 1 will address this barrier.

- **Barrier 2: High exposure of critical infrastructure to climate risks and an import dependent fossil fuel-based energy systems undermine climate resilience and service continuity**

Energy, water, and community infrastructure remain highly vulnerable to cyclones, flooding, and other climate hazards, leading to service disruptions during and after extreme events. Root causes include aging infrastructure assets, insufficient climate-proof design standards, limited redundancy in service systems, and historic underinvestment in resilient infrastructure.

The tourism sector has become one of the main drivers of economic activity and an important source of revenue, employment, and private sector development in Niue. However, tourism and local livelihoods are highly sensitive to disruptions in water, energy, and transport services, particularly during extreme weather events and dry periods. Root causes include limited availability of climate-resilient facilities, seasonal variability in water and energy supply, and the close dependence of economic activity on reliable infrastructure and healthy ecosystems.

Finally, Niue's heavy reliance on imported diesel fuel increases exposure to supply disruptions and price volatility, undermining energy security and the reliability of essential services. Root causes include geographic isolation, limited domestic energy resources beyond renewables, and historically high costs of transitioning to integrated, resilient renewable energy systems.

Component 2 will address this barrier.

- **Barrier 3: Limited community stewardship and local capacity to sustain ecosystem and infrastructure investments**

Long-term sustainability of infrastructure and ecosystem investments is constrained by limited local technical capacity, operation and maintenance challenges, and weak stewardship mechanisms. Root causes include Niue's small population, skills gaps, staff turnover, and the absence of structured systems for community-based management and monitoring.

Components 2 and 3 will address this barrier.

- **Barrier 4: Degraded coastal terraces and ecosystems reducing natural protection against climate impacts**

Coastal terraces and ecosystems that historically provided natural protection against erosion and storm surges are increasingly degraded, reducing their buffering capacity. Root causes include climate-driven erosion, invasive species pressures, and land-use practices that weakened ecosystem integrity and resilience.

Component 3 will address this barrier.

- **Barrier 5: Limited access to finance and investment for low-emission and resilience-enhancing measures and to manage large MPAs**

Small island economies like Niue face persistent financial barriers that limit the deployment and scaling of climate-resilient and low-emission solutions. Constraints include a narrow domestic revenue base, high dependency on external funding, limited private sector participation, and the absence of instruments and incentives for climate-aligned investments. For example, in the energy sector, an artificially set revenue recovery tariff means that the utility of Niue's (NPC) revenue recovery is just enough to cover essential O&M and the country's power sector lacks internally generated capital to co-finance projects. Geographic remoteness further drives up the cost of virtually every input, such as transport and equipment shipping and skilled-labor deployment making infrastructure, and its operation and maintenance, costlier than on mainland systems. As a result, infrastructure work is often focused on urgent repairs and immediate operational issues, leaving limited bandwidth and resources to invest in proactive, long-term infrastructure investment and upgrades. Against the backdrop of high shipping costs, a tiny customer base, an incomplete regulatory framework and the island's vulnerability to climate shocks, these financing gaps deter investors and make each round of climate resilient and low-emission infrastructure investment dependent on episodic donor grants, slowing the pace at which Niue can transition from planning to investment-ready projects. At the community level, access to capital for infrastructure upgrades or

adaptation measures is constrained by low household incomes, credit access challenges, and high imported equipment costs. These financial constraints slow technology uptake, impede maintenance, and restrict the ability to transition away from fossil fuel dependence toward nature-based and renewable alternatives.

Furthermore, given the size and scale of the Moana Mahu MPA and the Niue Nukutuluea Multiple-Use Marine Park, securing long-term sustainable financing is a key barrier to sustaining conservation efforts and fulfilling its NDCs and the 30x30 CBD targets for ocean conservation. This financing gap results in high dependence on short-term donor and project-based funding with high transaction costs, which undermines continuity, long-term planning, and resilience of protected area management systems. The barrier directly justifies GEF investment in the NOW Trust Fund, as GEF support helps overcome this structural constraint by establishing a durable, predictable financing mechanism that aligns Niue's global conservation commitments with the long-term resources required to maintain them. Blending of multiple sources of funds through the NOW Trust also reduces significantly the administrative burden of multiple reporting template requirements and rather ensures limited capacity in Niue can focus on achieving results rather than just reporting on them.

Components 1, 2, 3 and 4 will address this barrier.

- **Barrier 6: Weak knowledge retention, monitoring, and learning systems**

The absence of integrated monitoring and feedback systems limits Niue's ability to track performance, learn from implementation, and adjust responses over time. Root causes include limited institutionalization of monitoring processes, capacity constraints, staff turnover, and insufficient platforms for knowledge retention and exchange at national and regional levels.

The ability to sustain and scale climate-resilient and low-emission interventions in Niue is constrained by weak systems for capturing lessons learned, retaining institutional knowledge, and facilitating peer-to-peer learning across sectors and with regional partners. Since 1966, Niue's resident population has declined from over 5,000 people to approximately 1,681 in 2022.^{[33]³³} This sustained outmigration created a significant diaspora larger than the resident population that constrains local institutional capacity, continuity, and memory. Moreover, high staff turnover and reliance on external consultants mean that lessons learned during project implementation are often not systematically documented or retained, reducing opportunities for adaptive learning and continuity. This challenge is compounded by Niue's geographic isolation, which limits regular in-person engagement and peer exchange with regional partners further constraining sustained resilience-building beyond individual projects.

Component 5 will address this barrier.

4. From fragmented responses to integrated resilience and low-emission development

Recent projects and investments have laid important foundations in strengthening Niue's climate resilience and mitigation ambitions. In the mitigation and energy sector, the GEF-funded AREAN project (GEF ID 9752), implemented by UNDP, has supported renewable energy and energy efficiency policy development, institutional capacity building, deployment of climate-resilient low-carbon technologies, and improved access to clean-energy financing. Implemented from 2019 to mid-2025, AREAN adopted a holistic approach combining policy reform, institutional strengthening, technology deployment, and public awareness, and laid the foundation for achieving Niue's NDC and 2035 Energy Roadmap target of 80% renewable electricity. Demonstration projects (streetlighting, building retrofits, EV pilot) improved safety and awareness, while legal and policy frameworks laid groundwork for future progress. Key policy achievements included support to the drafting of the Electric Power Supply and Energy Amendment Bill and a comprehensive review of low-carbon laws and policies, creating an enabling environment for renewable energy investment. The project also strengthened cooperation between key institutions (notably the Department of Utilities DoU and Niue Power Corporation (NPC)), including through grid assessments, power-stability studies, and technical training for NPC staff that improved electricity reliability across all villages. Technological advances included the installation of 136 LED streetlights island-wide, solar water pumps, EV charging points, energy-efficient retrofits in public buildings, and the provision of 19 new transformers and upgraded grid infrastructure. When severe storms in 2023–2024 left parts of Niue without power for several days, these grid upgrades proved critical in restoring and stabilizing electricity supply, demonstrating tangible resilience benefits. AREAN also created strategic momentum through the 2025 National Energy Summit, where national leaders endorsed the revised Energy Act, discussed establishing a dedicated Niue Energy Authority, clarified remaining barriers and opened new pathways for private sector participation and regional alignment. However, the project terminal evaluation noted that progress was fragmented across policy, demonstrations, and capacity-building, with gaps in resilience planning, waste management, monitoring systems, and financing mechanisms.^[34]³⁴

NIUE-IECI draws directly on the achievements and lessons generated by the AREAN project by moving from isolated interventions toward a coordinated, multi-focal approach that integrates mitigation and adaptation, strengthens institutional systems beyond individual agencies, embeds climate and energy risk into planning, and links infrastructure, ecosystem resilience, and knowledge systems into one coherent programme. It will also embed climate and energy risk considerations into whole-of-government planning and infrastructure standards, and by extending resilience beyond the energy sector to water systems, emergency shelters, tourism infrastructure, and community services.

In the energy sector, ADB technical assistance is currently strengthening the NPC's capacity for renewable energy integration through improved asset management, data systems, staff training, and gender-inclusive workforce development. The proposed IECI project complements this ADB technical assistance by extending strengthened utility capacity into climate-risk governance and resilient infrastructure deployment, ensuring that improved asset management and technical systems are embedded within a broader, integrated resilience and low-emission development framework.

In the adaptation and water sectors, Niue has participated in the GEF-funded Ridge to Reef (R2R) (GEF ID 5552) project which strengthened integrated land–water–coastal management, biodiversity conservation,

and ecosystem service protection through cross-sectoral coordination and community engagement. While these initiatives established an important foundation for ecosystem resilience planning, they focused primarily on policy integration and conservation frameworks rather than on-the-ground ecosystem-based adaptation implementation. Further, none have fully implemented a structured ecosystem-based adaptation focused on restoring natural coastal terraces and other protective landscape features as part of a broader resilience investment. NIUE-IECI builds directly on these foundations by operationalizing integrated coastal and ecosystem management, linking ecosystem health with infrastructure resilience, embedding community stewardship and participatory monitoring into adaptive management. This is expected to bridge policy, governance, on-the-ground implementation, and monitoring and learning in a way not yet realized in previous projects.

The proposed project is also complementary to the ongoing UNEP-GCF Enhancing Climate Information and Knowledge Services for Resilience in 5 Island Countries of the Pacific Ocean (CIS-PAC5) initiative, as both seek to strengthen the use of climate information for decision-making and to build adaptive capacity in Pacific SIDS. While CIS-PAC5 focuses on improving climate data services, early warning systems, and access to climate information across multiple national sectors, the proposed project leverages these enhanced climate information foundations to operationalize risk data directly within national planning, infrastructure design, and coastal ecosystem restoration in Niue. Rather than duplicating climate information generation, Niue-IECI emphasizes the application and integration of risk data into resilient infrastructure investments, governance frameworks, and community practices, thereby extending the utility of CIS-PAC5 outputs into concrete adaptation and mitigation actions. This ensures both initiatives reinforce each other, where CIS-PAC5 improves the quality and accessibility of climate information, and this project strengthening institutional use of that information to reduce vulnerability and enhance resilience on the ground. During the PPG phase, complementarities with the UNEP-GCF CIS-PAC5 project will be further defined to ensure that Niue-IECI builds on improved climate data, institutional coordination mechanisms, and sector engagement processes established under CIS-PAC5, while avoiding duplication in climate information generation and focusing on investment-oriented application of climate risk information.

Niue-IECI is also complementary to a planned Adaptation Fund project on invasive species management for ecosystem-based adaptation^[35], as both contribute to climate resilience but operate at different entry points. The AF project focuses on enhancing ecosystem resilience by controlling invasive species, restoring habitats, and improving food security and livelihoods for vulnerable communities. The Niue-IECI operationalizes climate resilience through integrated climate-risk governance, low-emission and climate-resilient infrastructure, and terrace-based ecosystem restoration to protect settlements and services from climate impacts while gaining mitigation outcomes at the same time. Niue-IECI will also seek synergies with the UNIDO/GEF Global Program on Climate-Resilient Renewable Energy Systems (G-RES) (under review), which aims to promote climate-resilient renewable energy solutions and private sector engagement across SIDS. Collaboration will focus on knowledge exchange, alignment of technical approaches, and opportunities for private sector participation, with detailed modalities of cooperation to be further defined during the project design phase.

The objective of the NIUE IECI project is to enhance Niue’s climate change mitigation and adaptation and biodiversity protection through low-emission infrastructure, nature-based solutions, and sustainable long-term financing. The project has been designed in a way so that root causes of vulnerability are addressed rather than only their symptoms. Unlike infrastructure-only or ecosystem-only approaches, NIUE-IECI integrates governance reform, physical investments, community stewardship, and institutional learning into a single, coherent framework.

The project is designed to remain robust under uncertain future scenarios, including more intense cyclones, longer dry periods, and economic volatility. By institutionalizing climate risk information, strengthening local management capacity, and embedding adaptive learning, the project's outcomes are expected to endure even as climate drivers and development barriers evolve.

Table 2: Synergies and alignment with other completed and ongoing projects in Niue

Project	Status	Project focus
Application of Ridge to Reef Concept for Biodiversity Conservation, and for the Enhancement of Ecosystem Service and Cultural Heritage in Niue (GEF ID 5552) (USD 4.2 mio) (UNDP/GEF) (2016-2024)	Completed	Strengthened conservation and sustainable use of land, water and marine areas and their biodiversity by building on their cultural heritage values through integrated national and community actions
Niue International Waters Ridge to Reef Project (USD 200,000) (UNDP/SPC/GEF) (2017-2022)	Completed	Tested the mainstreaming of the ridge to reef, climate resilient approaches to integrated land, water, forest, and coastal management in the PICs through strategic planning, and capacity building and piloted local actions to sustain livelihoods and preserve ecosystem service
Accelerating Renewable Energy Applications in Niue (GEF ID 9752) (USD \$3.32 mio) (UNDP/GEF) (2021-2025)	Completed	Supported renewable energy and energy efficiency policy development, institutional capacity building, deployment of climate-resilient low-carbon technologies, and improved access to clean-energy financing.
Small Island Developing States Leave No One Behind Integrated Policy Innovative and Sustainable Policy and Digital Solutions to Catalyse Enhanced Food and Livelihood Security in Niue (USD 700k) (FAO/UNDP/UNICEF)	Completed	Developed a gender responsive ICT policy (SDG 9), a gender sensitive integrated ocean management strategy (SDG 14), and an inclusive nutrition policy frameworks, including a High Impact Nutrition Intervention (HINI) framework (SDG 2) as key policy mechanisms envisioned to accelerate the delivery of threefold benefits.
GEF OP 7 Small Grants Programme – Saving our Peka using digital platform and through our disability community (USD 25k) – Taoke Piggery & Coconut Plantation (USD 40k) – Vaiea invasive species mitigation project (USD 50k)	Completed	Community scale biodiversity and land degradation projects that can be upscaled.
Clean and Resilient Energy Development Support Project (USD 700,000) (ADB) (2025-2026)	Ongoing	Strengthen Niue Power Corporation's capacity for renewable energy integration through improved asset management, data systems, staff training, and gender-inclusive workforce development.
Climate Promise (UNDP)	Ongoing	Supporting Niue in developing its updated NDC.
Robust sustainable tourism and agriculture sectors in Niue supported by biodiversity mainstreaming and sustainable land management (USD 3.5 mio) (UNEP/GEF) (2023-)	Ongoing	Supporting Niue in enhancing biodiversity conservation and sustainable land management through the development of sustainable and biodiversity-friendly tourism and agriculture sectors.
UNEP-GCF Enhancing Climate Information and Knowledge Services for Resilience in 5 Island Countries of the Pacific Ocean (CIS-PAC5) (USD 50mio) (UNEP/GCF) (2022-2026)	Ongoing	Facilitate the development of integrated climate and ocean information services and people-centered multi-hazard early warning systems (MHEWS).
Invasive Species Management for Ecosystem-based Adaptation to Climate Change (USD 13.4 mio) (Adaptation Fund/SPREP) (Tonga and Niue)	Planned (Concept stage)	The project aims to target ecosystem resilience through invasive species control and habitat restoration, strengthening food security and livelihoods, and promoting regional cooperation for nature-based climate adaptation in small island communities. During the PPG phase, complementarities with the AF project will be further defined.
Global Program on Climate-Resilient Renewable Energy Systems (G-RES) (GEF/UNIDO)	Planned (under review)	Supports the deployment of climate-resilient renewable energy systems in SIDS through regional cooperation, private sector engagement, and capacity building, with a focus on reducing fossil fuel dependence, strengthening energy security, and enhancing resilience across key sectors such as tourism, water, and agri-food systems. Collaboration will focus on knowledge exchange, alignment

		of technical approaches, and opportunities for private sector participation, with detailed modalities of cooperation to be further defined during the project design phase
<p>Blue Nature Alliance</p>	<p>Ongoing</p>	<p>Catalyze the conservation of 1.25 billion hectares of ocean ecosystems, to safeguard biodiversity, help build resilience to climate change, promote human well-being and enhance ecosystem connectivity and function.</p> <p>The Blue Nature Alliance’s has been in partnership with Niue since 2022, with two key interventions as part of its 3-year grant:</p> <ol style="list-style-type: none"> 1. Design, establish, and help source a durable finance model that generates financial revenues in support of Government, NOW, and communities’ efforts to durably implement the sites. 2. Develop the Nukutuluea’s Monitoring and Evaluation framework and build institutional capacity to demonstrate management effectiveness of the site. <p>Specific to key intervention #1, the Alliance’s Conservation Finance Delivery team has provided technical assistance in establishing the NOW Trust and the design of Ocean Conservation Commitments (OCC). The Alliance grant ended in March 2025, with both two success measures met. The Alliance will continue to support NOW in the expansion of the innovative OCC model through its Growing the Field portfolio.</p>
<p>Adapting tuna-dependent Pacific Island communities and economies to climate change (GCF/CI/SPC)</p>	<p>Implementation</p>	<p>This project intends to build resilience in tuna-dependent economies and communities by addressing food insecurity and economic risks caused by climate change. It will achieve this by enhancing access to tuna for coastal and urban communities, strengthening national fisheries systems, and improving forecasting to manage tuna redistribution effectively. Key activities will include technical support for Fish Aggregating Devices (FADs) deployment, fisher training, post-harvest improvement; policy development, improved handling, and market opportunities; and using science-based forecasts and projections to reduce uncertainty in climate change-driven tuna redistribution.</p> <p>This project covers 14 PICs and uses a comprehensive programmatic approach to address food security and the economic stability of tuna fisheries. It prioritizes community-driven adaptation by deploying FADs, training fishers, and involving local stakeholders in decision-making. With women’s participation actively promoted, this inclusive approach ensures adaptation measures will align with local needs and traditional practices.</p> <p>This project will complement the NOW Trust approach to enhance a resilient ocean positive blue economy including sustainable fisheries that is reinforcing ocean protection and conservation. Conservation must sit alongside sustainable development in order for it to last.</p>

6. Stakeholder roles and alignment with country priorities

Key stakeholders of the project include national government agencies (Office of the Prime Minister, Tāoga Niue, Ministry of Natural Resources (Department of Environment, Department of Agriculture, Forestry and Fisheries), Ministry of Finance and Planning (Treasury, Project Management and Coordination Unit), Ministry of Infrastructure, Niue Power Corporation, responsible for planning, environment, energy, and infrastructure, Niue Chamber of Commerce, Niue Island United Associations NGOs (NIUANGO), Niue Tourism, village councils, tourism operators and associations, civil society and women’s organizations, regional institutions and other development partners. The private sector, particularly tourism operators, plays a critical role in sustaining resilient services and co-benefiting from infrastructure investments. Communities and village councils are central to stewardship, maintenance, and monitoring of both infrastructure and ecosystems.

The project builds directly on past and ongoing investments, including GEF- and non-GEF-supported initiatives. It complements these efforts by addressing gaps in governance integration, ecosystem-based adaptation and natural GHG emission removal, community stewardship, and learning systems. The project aligns closely with Niue’s national development priorities, climate commitments, and sectoral strategies, and is designed to generate lessons that can be replicated across other Pacific Small Island Developing States.

[1] <https://niuestatistics.nu/census/population-housing/>

[2] <https://www.bluenaturealliance.org/locations/niue/>

[3] <https://www.britannica.com/place/Niue>

[4] https://www.preventionweb.net/files/28164_niuepacc.pdf?startDownload=true

[5] <https://www.britannica.com/place/Niue>

[6] <https://unfccc.int/sites/default/files/2025-07/NIUE%20NDC%203.0.pdf>

[7] *ibid*

[8] The data from this section is derived from: McGree, S., G. Smith, E. Chandler, N. Herold, Z. Begg, Y. Kuleshov, P. Malsale, and M. Ritman, *Climate Change in the Pacific 2022: Historical and Recent Variability, Extremes and Change*. 2022 Climate and Oceans Support Program in the Pacific. Pacific Community: Suva, Fiji.

[9] McGree, S., G. Smith, E. Chandler, N. Herold, Z. Begg, Y. Kuleshov, P. Malsale, and M. Ritman, *Climate Change in the Pacific 2022: Historical and Recent Variability, Extremes and Change*. 2022 Climate and Oceans Support Program in the Pacific. Pacific Community: Suva, Fiji.

[10] https://www.rccap.org/uploads/files/f80a6b9d-a126-4e5b-af6f-e732937e98ab/Niue%20Country%20Report_Updated.pdf

[11] McGree, S., G. Smith, E. Chandler, N. Herold, Z. Begg, Y. Kuleshov, P. Malsale, and M. Ritman, *Climate Change in the Pacific 2022: Historical and Recent Variability, Extremes and Change*. 2022 Climate and Oceans Support Program in the Pacific. Pacific Community: Suva, Fiji.

[12] https://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/8_PCCSP_Poster_Niue.pdf

[13] https://www.rccap.org/uploads/files/f80a6b9d-a126-4e5b-af6f-e732937e98ab/Niue%20Country%20Report_Updated.pdf

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[17] *Ibid*.

[18] https://www.rccap.org/uploads/files/f80a6b9d-a126-4e5b-af6f-e732937e98ab/Niue%20Country%20Report_Updated.pdf

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[20] <https://unfccc.int/sites/default/files/2025-07/NIUE%20NDC%203.0.pdf>

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[23] [Niue_Oceania_RE_SP.pdf](#)

[24] https://www.theprif.org/sites/theprif.org/files/documents/Pacific%20Infrastructure%20Performance%20Indicators_2021_Web_0.pdf

[25] [NIUE NDC 3.0.pdf](#)

[26] [The Government of Niue | Niue Renewable Energy](#)

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[28] https://brb.sprep.org/sites/default/files/2021-12/7_10.pdf

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[34] <https://erc.undp.org/evaluation/documents/download/24880>

[35] [AFB.PPRC_36.Inf_25.-Proposal-for-Niue-Tonga.pdf](#)

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

Strengthening low-carbon climate resilience and low-emission transition in Niue requires an integrated approach that addresses governance, infrastructure, ecosystems, and institutional capacity in a single, interconnected approach. Recognizing the critical window of opportunity created by recent progress, the project moves beyond fragmented, sector-specific responses to deliver a system-level resilience transformation. Rather than reacting to climate shocks after they occur, it proposes proactive, forward-looking interventions that embed climate and energy risks into planning, modernize critical infrastructure and services, restore protective coastal ecosystems, and institutionalize learning and adaptive management. A core element of this approach is the project's contribution to the Niue Ocean Wide (NOW) Trust Fund, which will provide sustainable, long-term financing for biodiversity conservation and the effective management of Niue's marine protected areas across its EEZ. By capitalizing the NOW Trust, the project helps address a critical financing barrier, ensuring that conservation and resilience gains are maintained beyond the project lifetime and that MPAs continue to deliver global biodiversity and climate

benefits. It further ensures that ocean positive economic development opportunities are enhanced in villages, private sectors, and governments to ensure long term support for ocean conservation as it clearly adds value rather than creates an economic burden. By aligning with national priorities, leveraging community stewardship and regional collaboration, and generating both mitigation and adaptation benefits, the project positions Niue to mitigate GHG emissions, protect development gains and sustain resilience in the face of escalating climate and socio-economic uncertainty.

Theory of Change: how the project will deliver lasting impact

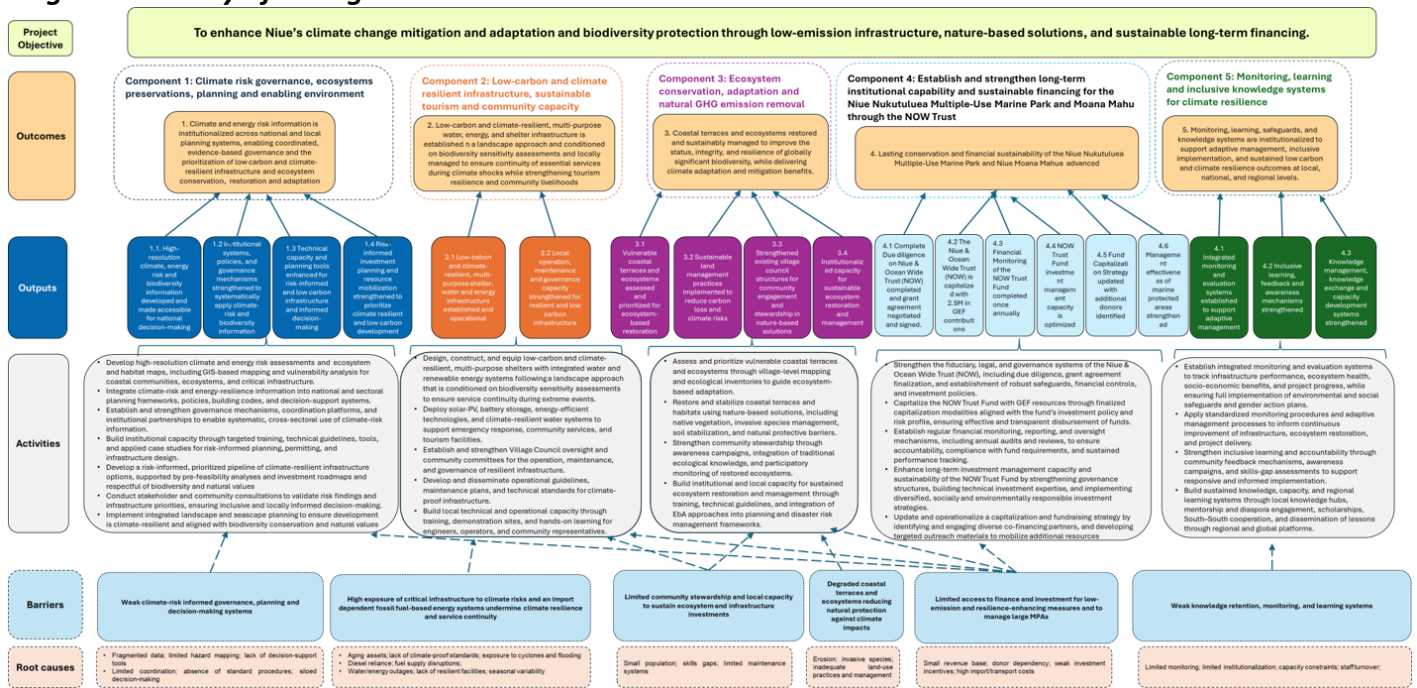
At the core of the project's Theory of Change is the recognition that a low emission and climate resilient transition in Niue depends on the integrated functioning of governance systems, low-emission and resilient infrastructure and services, healthy ecosystems and biodiversity, and sustained institutional learning. Two key priorities of Niue's 2025 NDC are the reduction of energy sector emissions by increasing the share of renewable energy to 80% of total electricity generation by 2030 and to increase carbon storage capacity by pursuing actions to restore and convert unproductive/degraded land such as degraded forest, barren land, and abandoned land.^{[1]36} Directly aligned to these priorities, the project delivers against these priorities through five mutually reinforcing components: (i) risk-informed governance, which institutionalizes climate and energy risk information in planning, policies, and investment prioritization; (ii) low-emission and climate-resilient infrastructure and services, which establish multi-purpose water, energy, and shelter systems that ensure service continuity and support livelihoods and tourism; (iii) ecosystem restoration and ecosystem-based adaptation, which restores coastal terraces and ecosystems to enhance and ensure continued natural GHG emission removal, strengthen natural protection and community stewardship while conserving and enhancing native biodiversity, protecting critical habitats, and improving ecosystem integrity and connectivity across terrestrial and coastal systems; (iv) capitalizing the NOW Trust to ensure that conservation and resilience gains are maintained beyond the project lifetime and that MPAs continue to deliver global biodiversity and climate benefits, and (v) monitoring, learning, safeguards, and knowledge systems, which enable adaptive management, inclusive implementation, and long-term sustainability.

The project addresses the above identified barriers and reinforcing drivers of vulnerability through a coherent package of targeted interventions developed through consultations with government agencies, utilities, village councils, communities, and development partners, and grounded in Niue's institutional and capacity realities. Based on this barrier analysis, the Theory of Change (Figure 1) illustrates the causal pathways from activities to outputs, outcomes, and long-term impact. **IF** climate and energy risks are systematically assessed and embedded in governance and planning systems; and **if** climate-resilient, low-carbon infrastructure and services are established and locally managed; and **if** degraded coastal ecosystems are restored and continuously managed and maintained by communities resulting in improved habitat quality, increased species abundance, and strengthened ecosystem services; and **if** conservation and resilience gains are maintained beyond the project lifetime by capitalizing the NOW Trust ensuring sustained financing and effective management of protected areas and biodiversity assets, and **if** monitoring, safeguards, learning, and knowledge exchange systems are institutionalized, **then** Niue's exposure and sensitivity to climate shocks will be reduced, its adaptive capacity strengthened, and its native biodiversity will be conserved **because** these actions will contribute to the national climate targets including 80% renewable energy by 2025 and increasing carbon storage capacity from restored land, deliver measurable global environmental benefits through biodiversity conservation, improved ecosystem

integrity, and enhanced carbon sequestration functions, and lead to improved decision-making, low-carbon and more resilient and reliable services, strengthened and climate-resilient ecosystem functions, enhanced community and institutional capacity, and sustained learning.

This pathway assumes continued stakeholder engagement, effective uptake of risk information by institutions, appropriate operation and maintenance of infrastructure and ecosystems, and sustained donor and policy support to overcome capacity and investment constraints. By embedding resilience across governance, infrastructure, ecosystems, and learning systems, the project ensures that adaptation and mitigation co-benefits are durable and sustained in the face of escalating climate and socio-economic uncertainty, while generating long-term biodiversity conservation outcomes that safeguard Niue's ecosystem services.

Figure 1: Theory of Change



Components and interventions

The objective of the NIUE IECI project is **to enhance Niue's climate change mitigation and adaptation and biodiversity protection through low-emission infrastructure, nature-based solutions, and sustainable long-term financing.**

The project is transformative in that it shifts Niue from fragmented, reactive responses to a systems-based resilience model that integrates mitigation and adaptation ambitions for infrastructure, ecosystems, governance, and communities. An estimated 1,142 people (560 men / 582 women) which is 70% of Niue's population will directly benefit from the project. The project will lead to 11,188 tCO2e direct and indirect lifetime emission reductions. 60 hectares of coastal ecosystems will be restored and under improved practice as a result of the project.

The project will deliver against its overall objective through five interconnected components:

Component 1: Climate risk governance, ecosystems preservation, planning and enabling environment

Niue's exposure to climate change poses systemic risks to its communities, ecosystems, and critical infrastructure. These risks are compounded by limited availability and use of climate and energy risk information in decision-making, fragmented institutional mandates, and weak mechanisms for translating risk data into planning, permitting, and investment prioritization. While climate, land-use, energy, and

coastal management policies exist, they are often developed in isolation, rely on outdated hazard information, and lack practical tools and procedures for consistent application at national and village levels. As a result, infrastructure and development decisions continue to be made without systematically accounting for future climate and energy risks, leading to increased vulnerability, inefficient allocation of resources, and missed opportunities to integrate low-emission and resilient development pathways.

This component addresses these governance and planning barriers by establishing a robust biodiversity, climate- and energy-risk-informed enabling environment that underpins all future infrastructure, ecosystem, and community investments under the project and beyond. It will generate high-resolution climate and energy risk assessments for Niue's coastal communities, ecosystems, and critical infrastructure, integrating hazards such as cyclones, flooding, salt corrosion, and sea-level rise with energy system vulnerabilities and exposure. These assessments will be embedded into accessible GIS platforms and decision-support tools, and formally integrated into national and sectoral planning instruments, including land-use planning, coastal management guidelines, infrastructure standards, and building codes.

In addition, this component incorporates landscape and seascape approaches by generating high-resolution ecosystem and habitat maps for coastal communities, including maps on ecosystem sensitivity and MPA buffer zones. These maps and datasets will be integrated with climate and energy risk information to ensure that infrastructure siting decisions will be assessed against ecosystem and sensitivity maps and MPA buffer zones. This will also include developing strategy and management plans for invasive alien species (IAS) to inform the management and control of IAS under component 3. By explicitly incorporating biodiversity conservation priorities, the project ensures that infrastructure siting decisions will be assessed against biodiversity priorities informed by ecosystem sensitivity maps and MPA buffer zones.

Complementing the technical biodiversity protection risk analysis, the component will strengthen institutional systems and governance mechanisms to ensure that biodiversity and climate risk information is systematically applied in practice. This includes establishing or strengthening inter-agency coordination platforms, updating policies and procedures for risk-informed planning and permitting, and creating regular data-sharing and coordination processes across relevant ministries and village councils. Targeted capacity-building, technical guidelines, screening tools, and applied case studies will enable planners, technical staff, and local authorities to interpret climate and energy risk information and use it effectively in infrastructure design, review, and prioritization. The component will also support the development of a prioritized, risk-informed pipeline of low-carbon and climate-resilient infrastructure and ecosystem investments, supported by pre-feasibility analysis and investment roadmaps to guide resource mobilization.

By strengthening governance, planning, and regulatory frameworks, the project embeds climate and energy risk and biodiversity considerations into national decision-making, infrastructure standards, and investment prioritization. This accelerates the deployment and integration of renewable energy, storage, and energy-efficiency measures, and prevents lock-in to diesel-based systems, thereby facilitating sustained mitigation outcomes at national scale.

This component will ensure that climate, energy risk and biodiversity governance processes are gender-responsive and inclusive, recognizing that women and men often experience climate risks, energy and water insecurities, and decision-making processes differently. Gender considerations will be systematically integrated into climate and energy risk assessments, planning tools, and policy development, including through the application of the Gender Strategy and Action plan and the use of gender-disaggregated data where available and targeted gender analysis to inform decision-making. National and inter-agency coordination mechanisms supported under this component will promote the meaningful participation of

women, women's groups, and designated gender focal points, ensuring that resilience priorities reflect differentiated needs, roles, and capacities. Capacity-building activities will specifically target women.

The project places a strong emphasis on engaging the private sector throughout its design and implementation. Under this component, during the project formulation phase, private sector actors will contribute to the identification and validation of priority infrastructure investments and standards, ensuring that proposed solutions are both technically feasible and aligned with market conditions and business needs. Private sector engagement will also be facilitated through structured consultations with the Niue Chamber of Commerce to ensure that climate risk assessments, planning tools, and investment priorities reflect the needs and constraints of key economic sectors, particularly tourism, services, and construction.

During implementation, the Chamber of Commerce will continue to provide a coordination platform between government and businesses, supporting the integration of private sector perspectives into planning processes and investment pipelines.

Component 1 has one Outcome and five Outputs:

Outcome 1: Climate and energy risk information is institutionalized across national and local planning systems, enabling coordinated, evidence-based governance and the prioritization of low-carbon and climate-resilient infrastructure and ecosystem conservation, restoration and adaptation.

Output 1.1 High-resolution climate, energy risk and biodiversity information developed and made accessible for national decision-making

1.1.1 Produce high-resolution climate risk maps for coastal communities, ecosystems, and critical energy systems

1.1.2 Produce high-resolution ecosystem and habitats maps for coastal communities and develop strategy and management plans for invasive alien species

1.1.3 Develop and enhance a GIS database and decision-support tools accessible to national agencies

1.1.4 Conduct a comprehensive vulnerability assessment covering coastal hazards, energy infrastructure, and ecosystem exposure.

1.1.5 Integrate climate risk and energy resilience data into national and sectoral planning documents (land-use, coastal management)

1.1.6 Technical support to integrate low-carbon and climate-resilient infrastructure practices into government policies, planning frameworks, and building codes

1.1.7 Conduct multi-stakeholder consultations to validate risk findings and adaptation recommendations

Output 1.2. Institutional systems, policies, and governance mechanisms strengthened to systematically apply climate-risk and biodiversity information

1.2.1 Establish or strengthen governance mechanisms (e.g., inter-agency Technical Advisory Support Group).

1.2.2 Update or develop new policies, procedures, and guidelines to institutionalize the use of climate risk and biodiversity data in planning and permitting

1.2.3 Create regular coordination and data-sharing mechanisms and platforms

1.2.4 Conduct capacity-building sessions for governance bodies on collaborative decision-making and climate resilience integration

1.2.5 Facilitate partnerships with regional and international institutions to support continuous learning and access to technical expertise

Output 1.3. Technical capacity and planning tools enhanced for risk-informed and low-carbon infrastructure and informed decision-making

1.3.1 Develop and deliver training programs to government agencies, village councils, and technical staff on interpreting and applying climate risk information

1.3.2 Create technical guidelines for incorporating climate risk data into the design and review of infrastructure projects, including technical standards for climate-proof renewable energy installations

1.3.3 Develop applied case studies or pilot assessments demonstrating use of climate risk information in infrastructure planning

1.3.4 Produce tools and templates (screening checklists, risk assessment forms) for use by planning and permitting authorities

Output 1.4. Risk-informed investment planning and resource mobilization strengthened to prioritize climate-resilient and low-carbon development respectful of biodiversity and natural values

1.4.1 Develop prioritized list of climate-resilient and low-carbon infrastructure options with technical justification grounded in risk-mapping results

1.4.2 Develop an investment roadmap/resource-mobilization strategy to support the advancement of prioritized infrastructure projects

1.4.3 Conduct pre-feasibility analyses for selected priority infrastructure interventions

1.4.4 Conduct community consultations to validate infrastructure priorities in high-risk coastal areas

Output 1.5 Integrated landscape and seascape planning implemented to ensure development is climate-resilient and aligned with biodiversity conservation and natural values

Component 2: Low-carbon and climate-resilient infrastructure, sustainable tourism and community capacity

Niue's critical infrastructure and essential services, particularly water, energy, and community facilities, are increasingly exposed to climate-related shocks, including cyclones, flooding, prolonged dry periods, and fuel supply disruptions. These risks directly affect community safety, service continuity, and economic activity, particularly tourism, which is highly dependent on reliable infrastructure and environmental quality. Diesel still dominates the energy mix and two modern 1.28 MW containerized gensets as well as some older units provide 3.2 MW of operational diesel capacity. Fuel imports make up 12% of total imports. Niue's heavy dependence on imported diesel for electricity and critical services exposes communities to volatile fuel prices, supply chain disruptions, and external shocks, which compound climate risks and undermine service reliability. Existing facilities were not designed to operate under prolonged grid outages or extreme weather conditions, and limited redundancy, aging assets, and insufficient climate-proofing have resulted in service disruptions during past events. At the same time, local capacity for operation, maintenance, and governance of complex infrastructure systems remains constrained, increasing the risk that new investments will not be sustained over time.

By accelerating decarbonization through resilient solar-battery systems, this component reduces these vulnerabilities while strengthening energy security and long-term sustainability of essential infrastructure. This component will establish low-carbon and climate-resilient, multi-purpose infrastructure systems that

ensure continuity of essential services during climate shocks while strengthening local capacity for long-term operation and management. The component will support the design, construction, or retrofitting of pilot climate-proof emergency shelters in selected villages, equipped to function during grid outages or fuel shortages. Specifically, solar photovoltaic (PV)-battery systems will be installed in five multi-purpose climate-proof emergency shelters. The specific locations of the shelters will depend on cabinet and will be decided during project formulation stage following a detailed assessment and a clearly outlined selection process and relevant selection criteria. Shelters will most likely will be located on Crown land due to land tenure issues in Niue and to ensure public access, simplify permitting, and facilitate long-term operations and maintenance.

These solar PV-systems will be integrated with battery storage sized for critical loads, climate-resilient water supply systems (including rainwater harvesting, solar-powered pumping, storage, and purification), and energy-efficient appliances and smart energy management systems. By replacing diesel-based electricity generation and ensuring autonomous power and water services during grid outages and extreme weather events, these solar PV-battery systems deliver direct GHG emission reductions while significantly enhancing the resilience of critical community services to climate and supply-chain shocks. Designed as multi-purpose assets, the shelters will serve both emergency response functions and support eco-tourism and community activities during non-emergency periods, thereby enhancing economic resilience and utilization of infrastructure assets.

All infrastructure investments under this component will be guided by the integrated landscape and seascape planning developed under Component 1, ensuring that siting, design, and operation are aligned with biodiversity conservation priorities.

During the design phase, the project will engage the Niue Chamber of Commerce, tourism operators, and local service providers to inform site selection, infrastructure design, and system specifications, ensuring that solutions are responsive to local business needs and operational realities. During implementation, local private sector actors (such as solar PV providers, construction companies, and technical service providers) will be actively engaged in the installation, construction, and commissioning of climate-resilient energy, water, and shelter systems, supported through targeted training and capacity-building.

Beyond physical investments, the component places strong emphasis on local ownership, governance, and capacity strengthening. This will be done in close coordination with activities under Output 3.4 which also target capacity building for nature related activities. Village Councils and community committees will be supported to play an active role in oversight, operation, and maintenance of shelters and associated water and energy systems. This includes the development of operational guidelines, maintenance plans, and emergency protocols, as well as hands-on training for local operators, engineers, planners, and community representatives on climate-resilient design principles, renewable energy systems installation, troubleshooting, and routine maintenance. During the PPG and CEO Endorsement, assessments on (i) annual O&M cost estimates per shelter, (ii) asset ownership and revenue-collection authority for non-emergency multi-purpose use and plans to pursuing such revenue, (iii) cost-recovery instrument, (iv) and major repair/replacement reserve arrangements between Village Councils, stakeholders, and central government will be conducted to ensure financial sustainability of the shelters beyond project closure and potential revenue generation when not used as shelters.

Demonstration sites and participatory planning processes will ensure that infrastructure designs reflect local needs, traditional knowledge, and gender-differentiated use patterns, while strengthening community preparedness and stewardship. Community-level governance and operational guidelines will incorporate biodiversity stewardship principles, ensuring that infrastructure use, maintenance, and

associated activities do not negatively impact surrounding ecosystems and instead contribute to their protection. The pilot multi-purpose, climate-resilient facilities will serve as demonstrators for scalable low-emission service delivery models that can be replicated across other villages in Niue and adapted for similar outer-island and tourism facilities in Pacific SIDS (through component 4). By documenting costs, performance, and governance arrangements, the project will also enable national authorities and partners to upscale these solutions through future public investments and donor-financed programmes.

This component will adopt a gender-responsive approach to the design, implementation, and management of climate-resilient infrastructure, recognizing that women and men often have different roles in emergency response, water and energy use, tourism activities, and community governance. Participatory planning processes for shelters and associated water and energy systems will ensure the meaningful involvement of women, women's groups, and other underrepresented groups, enabling infrastructure designs to reflect differentiated needs related to safety, accessibility, caregiving responsibilities, and livelihood activities. Capacity-building activities will promote equitable participation of women in technical training, operation and maintenance, and governance roles within Village Councils and community committees. Operational guidelines, emergency protocols, and management arrangements will integrate gender considerations to enhance safety, inclusiveness, and effectiveness, thereby strengthening both social resilience and the long-term sustainability of infrastructure investments.

Component 2 has one Outcome and two Outputs:

Outcome 2: Low-carbon, climate-resilient, multi-purpose water, energy, and shelter infrastructure is established in a landscape approach and conditioned on biodiversity sensitivity assessments and locally managed to ensure continuity of essential services during climate shocks while strengthening tourism resilience and community livelihoods

2.1 Low-carbon, climate-resilient, multi-purpose shelter, water and energy infrastructure established and operational

- 2.1.1 Conduct detailed engineering designs, safeguards assessments and site plans for climate-resilient shelters following a landscape approach that is conditioned on biodiversity sensitivity assessments
- 2.1.2 Community consultation sessions, participatory planning workshops, and design charrettes to incorporate local knowledge and preferences into infrastructure projects
- 2.1.3 Construct or retrofit pilot shelters according to climate-resilient standards
- 2.1.4 Equip shelters with essential emergency facilities (bedding, sanitation, storage, first aid kits)
- 2.1.5 Verify shelter functionality and resilience through post-construction inspections and stress tests
- 2.1.6 Design climate-resilient water supply systems, including rainwater harvesting, solar-powered pumping, storage tanks, and water purification units
- 2.1.7 Install connect water infrastructure to shelters and selected existing tourism facilities without water tanks
- 2.1.8 Implement water efficiency measures to reduce waste and ensure year-round supply
- 2.1.9 Design renewable energy systems (solar panels, battery storage, microgrids) for shelters and tourism facilities.
- 2.1.10 Install and test energy systems to ensure functionality during extreme weather events
- 2.1.11 Integrate energy-efficient technologies (lighting, appliances) to optimize power usage

2.2 Local operation, maintenance and governance capacity strengthened for low-carbon and resilient infrastructure

- 2.2.1 Develop operational guidelines and maintenance plans for community use and emergency scenarios
- 2.2.3 Develop training manuals and protocols for local operators to manage energy systems sustainably

- 2.2.3 Implement demonstration projects or pilot shelters with active local participation, serving as hands-on learning platforms
- 2.2.4 Support Village Councils in providing oversight of shelters, water, and energy systems
- 2.2.5 Conduct capacity-building workshops on emergency response, operation and maintenance, troubleshooting, eco-tourism operations and biodiversity stewardship principles
- 2.2.6 Disseminate operational manuals and maintenance schedules to ensure long-term sustainability
- 2.2.7 Conduct training workshops for local engineers, planners, and community representatives on climate-resilient design principles, renewable energy systems installation, operation and maintenance and construction techniques for emergency shelters and other infrastructure
- 2.2.8 Develop and disseminate technical guidelines, toolkits, and standard operating procedures for climate-proof infrastructure planning, construction, and maintenance
- 2.2.9 Establish community committees or advisory groups responsible for monitoring, maintaining, and managing climate-resilient infrastructure

Component 3. Ecosystem conservation, adaptation and natural GHG emission removal

Niue's coastal terraces and ecosystems play a critical role in protecting communities, infrastructure, and livelihoods from climate-related hazards such as storm surges, coastal erosion, and intense rainfall. In addition, these terraces provide habitat for a variety of endemic species and coastal vegetation and soils function as important carbon storage and removal systems. However, many of these natural systems have been degraded over time due to climate pressures, invasive species, and land-use practices, reducing their capacity to buffer climate impacts and to continuously and effectively store carbon. The loss of ecosystem integrity has increased exposure of coastal villages and infrastructure to extreme weather events, while also undermining biodiversity, ecosystem services, and cultural values that are central to community well-being and economic activity.

This component addresses these challenges by implementing ecosystem-based adaptation (EbA) interventions that restore and enhance the protective function of coastal terraces and associated ecosystems, while ensuring continued and enhanced natural GHG emission removal and enhancing biodiversity and community stewardship. Using a village-by-village approach, the project will support the mapping and assessment of vulnerable coastal terraces and habitats to identify priority areas for restoration. Restoration activities will include planting native and indigenous vegetation, stabilizing soils, rehabilitating natural and stone terraces, managing invasive species, and reinforcing natural barriers such as vegetated embankments to reduce erosion and storm impacts. These interventions will be designed to enhance biodiversity, ecological connectivity, carbon removal potential, and ecosystem services, while strengthening the resilience of adjacent communities and infrastructure.

This component will focus on nature-based solutions with high mitigation and biodiversity protection potential by restoring and sustainably managing Niue's coastal terraces and associated ecosystems that function as important natural carbon sinks while also delivering critical adaptation and biodiversity benefits. By rehabilitating degraded coastal vegetation, stabilizing soils, managing invasive species, and strengthening natural barriers, the component reduces ongoing carbon loss from ecosystem degradation, enhances long-term CO₂ sequestration in biomass and soils and contributes enhanced biodiversity conservation. The identification and design of terrace restoration interventions will be informed by the integrated landscape and seascape planning developed under Component 1 and build on existing site-based analyses and participatory design approaches developed for Niue (e.g. Freddie (2018)[\[1\]](#)) which link coastal hazard exposure, land-use patterns, and community priorities to tailored design strategies for reducing wave impact and erosion risks.

The component emphasizes community engagement, traditional ecological knowledge, and institutional learning as core elements of sustainable ecosystem restoration. Village Councils and community stewardship groups will be actively involved in planning, implementation, and monitoring of conservation and restoration activities, supported by training programmers, participatory monitoring tools, and practical guidelines adapted to local conditions. The component will also support government agencies and technical personnel to integrate ecosystem-based adaptation approaches into national and local planning frameworks, coastal management policies, and disaster risk management strategies. In close coordination with activities planned under Output 2.2, the project will build institutional and community capacity for ecosystem conservation and coastal adaptation through targeted training and village-specific technical guidelines. Long-term sustainability of terrace restoration will be ensured by embedding maintenance and stewardship responsibilities within existing village council structures and community groups, supported by formalized roles, practical maintenance guidelines, and capacity-building, thereby avoiding reliance on project-specific arrangements beyond the project lifetime. The project will also encourage private sector stakeholders to participate in and support ecosystem restoration and stewardship activities, particularly where these contribute to protecting tourism assets, coastal infrastructure, and local livelihoods.

This component will promote gender-responsive ecosystem restoration and management by recognizing and valuing the distinct roles, knowledge, and capacities of women and men in coastal resource management and community stewardship. Restoration planning and implementation will actively involve women, women's groups, and traditional knowledge holders, ensuring that EbA and conservation interventions reflect diverse perspectives and livelihood priorities. Capacity-building and stewardship arrangements will support equitable participation of women in leadership, monitoring, and decision-making roles, while participatory monitoring tools will capture gender-differentiated benefits and impacts. By integrating gender considerations into ecosystem restoration and governance, the component enhances both social inclusion and the effectiveness and sustainability of EbA outcomes.

Component 3 has one Outcome and four Outputs:

Outcome 3. Coastal terraces and ecosystems restored and sustainably managed to improve the status, integrity, and resilience of globally significant biodiversity, while delivering climate adaptation and mitigation benefits.

3.1 Vulnerable coastal terraces and ecosystems assessed and prioritized for ecosystem restoration

3.1.1 Mapp and assess vulnerable coastal terraces following a village-by-village approach to identify priority areas for restoration in line with biodiversity conservation priorities

3.1.2 Conduct an inventory and assessment of native species and habitat types in target coastal areas to guide restoration activities

3.2 Sustainable land management practices implemented to reduce carbon loss and climate risks

3.2.1 Implement ecosystem restoration interventions, including planting native vegetation, invasive plant extraction, stabilizing soils, and rehabilitating natural terraces

3.2.2 Construct or reinforce natural barriers, such as vegetated embankments, or stone terraces, to reduce the impact of storm surges and erosion and enhance biodiversity protection

3.2.3 Rehabilitate degraded habitats to support native flora and fauna, including mangroves, coastal shrubs, and coral-associated species

3.2.4 Implement invasive species management plans to protect native biodiversity and ecosystem functions.

3.3 Strengthened existing village council structures for community engagement and stewardship in nature-based solutions

3.3.1 Conduct community awareness campaigns and workshops on ecosystem conservation, adaptation and coastal restoration techniques, alongside the formation of village councils' stewardship groups to support ongoing terrace restoration, maintenance, and monitoring activities

3.3.2 Integrate traditional ecological knowledge into restoration planning and implementation

3.3.3 Develop participatory monitoring tools to allow village councils to track the health and effectiveness of restored terraces and status of biodiversity

3.4 Institutionalized capacity for sustainable ecosystem restoration and management

3.4.1 Training programs for government agencies, technical personnel, and community leaders on planning, implementing, and maintaining ecosystem-based coastal mitigation and adaptation projects

3.4.2 Develop technical guidelines and best practice manuals for terrace restoration and coastal ecosystem management adapted for each village

3.4.3 Incorporate ecosystem-based adaptation approaches into national and local planning frameworks, policies, and disaster risk management strategies

Component 4: Establish and strengthen long-term institutional capability and sustainable financing for the Niue Nukutuluea Multiple-Use Marine Park and Moana Mahu through the NOW Trust.

Component 4 contributes to the long-term financial sustainability of the Niue Nukutuluea Multiple-use Marine Park and Moana Mahu large-scale marine protected area by contributing to the capitalization of the Niue and Ocean Wide (NOW) Trust. The Niue and Ocean Wide Trust (“NOW Trust”) is a charitable trust established under New Zealand law. It is governed by a Trust Deed dated 28th August 2023. It has a trust board incorporated under the Charitable Trusts Act 1957 (NZ) with registered number 50178753 and is a charity registered with Charities Services, Department of Internal Affairs, New Zealand, with registered number CC61526. The Trust was established through the Public-Private Partnership between the Government of Niue (GON) and Tofia Niue (Local non-profit), and is governed by six local Trustees (three nominated by the GON, and three Non-government including Tofia Niue). In addition to a local Niue based secretariat, a New Zealand based “Custodial Trustee” (Perpetual Guardian – Perpetual Trust Ltd) has been contracted to provide administrative, auditing, reporting, services as well as investment management services.

The NOW Trust Purpose is to support the conservation, protection and improvement of the physical and natural environment of Niue, particularly Niue’s ocean and terrestrial ecosystems and protected areas, and the Niue Nukutuluea Multiple-Use Marine Park and Moana Mahu Marine Protected area. To support sustainable ocean and onshore environmental management in Niue. To promote enhanced biodiversity and to promote sustainable development. To support Niue in emergencies and natural disasters and promote resilience and adaptation.

The GEF grant funds will be invested into the Niue Ocean Wide (NOW) Trust to support the four key outcome areas below and will assist in demonstrating momentum to other funders and accelerating full capitalization of the Trust to secure long-term sustainable financing for effective MPA management and sustainable use of ocean resources. A GEF grant of \$2.5 million represents a contribution of ~15% of the total initial capitalization target of NOW Trust \$18 million, and will raise the current capitalization from 41% to approximately ~53%

- I. Establish and strengthen long-term institutional capability and sustainable financing through: Establishment, operationalization and capitalization of the Trust, including hiring of key personnel; education and communication to build awareness for marine conservation; and, global and regional advocacy and development.
- II. Enhanced compliance and management capabilities through: the implementation of co-management policy and community-led resource management planning; enhance marine and fisheries resource management capacities; monitoring, control and surveillance enhancement; and, key species and ecosystem monitoring.
- III. Sustainability, climate resilience and risk reduction, including sustainable blue economy through: sustainable tailored tourism supported by leading standards and accreditation; integrated sustainable business capacity building; and, risk reduction and catastrophic risk insurance.
- IV. Incremental capability for conservation and sustainable development through: strengthening and enhancement of NOW Trust institutional capacity and governance structure and arrangements; Engage in education and communication to build awareness for marine conservation capacity; scholarship programme supporting future stewardship leadership and gender equity; and, Taoga Niue cultural enhancement and maintenance.

This component will complete due diligence on the NOW Trust Fund (Output 4.1), support its capitalization with GEF resources (Output 4.2), and strengthen fiduciary transparency (4.3). Given the capitalization target of \$18M with \$7.7M secured (2025 figures), the project will support fund investment management capability to ensure appropriate risk strategy and balanced diversification of its portfolio (Output 4.4). Finally, the project will support the revision of the fund capitalization strategy, especially on the identification of additional donors (Output 4.5).

Under Output 4.1, the project will strengthen the ability of the NOW Trust to reach financial sustainability in perpetuity including strengthening the fiduciary, governance, safeguards, and operational standards required for GEF investment. Illustrative activities include legal and financial due diligence, strengthening governance arrangements, strengthening investment policy and risk management systems, and completion of the grant agreement with the NOW Trust. Completion of due diligence provides the assurance necessary to channel GEF resources into a long-term financing instrument.

Under Output 4.2, GEF resources will be transferred into the NOW Trust to provide a stable and predictable revenue stream for MPA management. The capital injection will help close a critical financing gap and will anchor additional contributions from bilateral donors, private sector partners, and philanthropic organizations.

With Output 4.3, annual financial monitoring will track fund performance, investment income, spending allocations, compliance with fiduciary standards, and alignment with conservation priorities. This output strengthens transparency, accountability, and adaptive financial management, ensuring that trust fund resources are used effectively and deliver measurable conservation results.

Output 4.4 focuses on strengthening the investment management capacity of the NOW Trust Fund to ensure effective and continuous oversight of investment performance. This includes the adoption of a well defined risk management strategy and the maintenance of a balanced and diversified investment portfolio. The output emphasizes that investment decisions will continue to align with socially and environmentally responsible principles, as has already been approved by the NOW Trust Fund Board of Trustees. Overall, this output aims to enhance financial sustainability, accountability, and responsible stewardship of Trust Fund resources.

Output 4.5 will support the revision of the fund capitalization strategy. This strategy involves NOW Trust and other key stakeholders, and includes inter alia (i) finely-tuned communications/ advocacy plans; (ii) annual donor meetings informed on progress and operational efficiencies of NOW Trust; (iii) targeted in-depth assessments of potential revenue generation mechanisms in addition to the OCC.

Output 4.6 will strengthen management effectiveness of marine protected areas through the development and implementation of explicit management plans and improved conservation practices.

The capitalization funds from this project for the NOW Trust Fund will not be disbursed until there is a confirmed 1:1 match from a non-GEF source. The timing and conditionality of this mechanism will be clarified during PPG phase. Furthermore, the PPG phase will also explore opportunities to assess and account for blue carbon, positioning it as a potential financing mechanism while also strengthening the demonstration of the project's global environmental benefits. It will also examine innovative approaches to align and integrate NOW Trust grantmaking with project activities in order to maximize synergies and enhance tangible, on-the-ground impacts.

The project will also explore opportunities to test and operationalize the NOW Trust Fund through on-the-ground pilot activities, generating practical experience to inform implementation and enhance conservation and resilience outcomes.

At CEO Endorsement, the project will further strengthen the attribution logic linking SCCF-A financed activities, including climate risk governance, coastal EbA, and ecological monitoring, to concrete adaptation outcomes within the NOW Trust-supported MPA estate. This will include clearly articulating how SCCF-A investments

enhance climate-resilient MPA management and enable the systematic capture of adaptation co-benefits alongside conservation and financial sustainability outcomes.

Component 4 has one Outcome and 6 Outputs

Outcome 4.1 Lasting conservation and financial sustainability of the Niue Nukutuluea Multiple-Use Marine Park and Niue Moana Mahua advanced.

Output 4.1 Complete Due diligence on Niue & Ocean Wide Trust (NOW) completed and grant agreement negotiated and signed

4.1.1 Strengthen the fiduciary, legal and governance of the Now Trust, including strengthening governance arrangements, safeguards, financial controls and investment policies

4.1.2 Negotiate and sign grant agreement between CI and the NOW Trust

Output 4.2 The Niue & Ocean Wide Trust (NOW) capitalized with 2.7M in GEF contributions

Output 4.2 The Niue & Ocean Wide Trust (NOW) is capitalized with 2.5M in GEF contributions

4.2.1 Finalize capitalization modality in line with the fund investment policy and risk profile.

4.2.2. Disburse 2.7M in GEF resources to the NOW trust

Output 4.3 Financial Monitoring of the NOW Trust Fund completed once annually

Output 4.3 Financial Monitoring of the NOW Trust Fund completed once annually

4.3.1 Prepare annual reports from the fund in line with fund requirements for financial audits/reviews. These reports will be reviewed by the CI-GEF Agency for a period of 5 years after capitalization with the GEF investment.

Output 4.4 NOW Trust Fund investment management capacity is optimized to ensure regular oversight of investment performance, as well as an appropriate risk strategy and balanced diversification of its investment portfolio, ensuring the latter is socially and environmentally responsible (details to be defined by the NOW Trust Fund Board of Trustees)

4.4.1 Strengthen the investment governance framework, including roles of the Board of Trustees, investment committees, and external fund managers, to ensure regular oversight and accountability

4.4.2 Build investment capacity through technical assistance to enhance long-term fund sustainability

Output 4.5 Fund Capitalization Strategy updated with additional donors identified

Output 4.5 Fund Capitalization Strategy updated with additional donors identified

4.5.1 Update the NOW Trust Fund Capitalization strategy updated including analyzing fundraising needs, market conditions, lessons learned from previous contributions.

4.5.2 Identify and engage potential co-financing partners, including multilaterals, bilaterals, philanthropy and private sector.

4.5.3 Develop targeted fundraising materials per categorization of co-financing partners identified.

Output 4.6 Management effectiveness of marine protected areas strengthened through explicit management strategies and improvement of practices

Component 5: Monitoring, learning and inclusive knowledge systems for climate resilience

Effective climate resilience requires not only sound planning and investments, but also robust systems to monitor performance, manage risks, capture lessons, and adapt interventions over time. In Niue, monitoring and evaluation, environmental and social safeguards, knowledge management, and learning processes remain fragmented and insufficiently institutionalized, limiting the ability to assess results, inform adaptive management, and sustain outcomes beyond individual projects. Capacity constraints, staff turnover, and the absence of structured platforms for knowledge retention and exchange further weaken long-term resilience and reduce the scalability of successful approaches.

This component addresses these gaps by institutionalizing integrated monitoring, safeguards, and learning systems that support adaptive management and long-term sustainability across all project interventions. The component will establish monitoring and evaluation systems to track the performance, resilience, and socio-economic benefits of climate-resilient infrastructure and ecosystem-based adaptation measures, supported by standardized procedures and indicators. Both process-based (e.g. terrace stability, erosion rates) and outcome-based adaptation metrics (e.g. reduction in service disruption days, reduction in damage costs from extreme events) will be established. The component will also establish monitoring capacities to quantify the carbon sequestration potential and GHG emission reduction benefits of ecosystem-based and nature-based solutions, strengthening the evidence base for mitigation benefits alongside adaptation outcomes. Environmental and Social Safeguards (SES) and Gender Action Plans will be fully implemented to ensure inclusive, responsible, and risk-aware delivery of all project activities. Community feedback mechanisms, including surveys, focus groups, and participatory forums, will enable continuous learning and responsiveness to local needs. Knowledge exchange activities under the project will be linked to relevant regional initiatives, including the UNIDO/GEF Global Program on Climate-Resilient Renewable Energy Systems for SIDS (G-RES), to

facilitate peer learning, exchange of technical approaches, and dissemination of best practices across SIDS contexts.

In parallel, the component will strengthen knowledge management, capacity development, and regional exchange. A local knowledge hub will document lessons learned, best practices, and technical guidance, supported by mentorship programmes, skills assessments, scholarships, and engagement of the Niuean diaspora to strengthen human capital and retain expertise. Knowledge-sharing platforms and South–South cooperation activities such as twinning arrangements, exchange visits, and regional workshops will facilitate peer learning across Pacific SIDS, while communication products and engagement in regional and global forums will ensure that project experiences inform broader resilience agendas. Private sector actors will participate in capacity-building and knowledge-sharing activities, including training on climate risk management, resilient infrastructure use, and business continuity planning, facilitated through the Niue Chamber of Commerce.

This component will ensure that monitoring, safeguards, and learning systems are gender-responsive and inclusive. Gender-disaggregated indicators will be incorporated into monitoring frameworks to track differentiated benefits and impacts, while SES and Gender Action Plans will promote equitable participation and risk management throughout implementation. Knowledge management, mentorship, and capacity development initiatives will actively support women’s participation and leadership, including through targeted professional development opportunities and engagement of women in regional exchange and knowledge-sharing activities. By embedding gender considerations into learning and accountability systems, the component strengthens inclusive resilience and ensures that project benefits are equitably distributed and sustained.

Component 5 has one Outcome and three Outputs:

Outcome 5. Monitoring, learning, safeguards, and knowledge systems are institutionalized to support adaptive management, inclusive implementation, and sustained low-carbon and climate resilience outcomes at local, national, and regional levels

5.1 Integrated monitoring and evaluation systems established to support adaptive management

5.1.1. Establish monitoring and evaluation system to track usage, performance, and socio-economic benefits of infrastructure

5.1.2 Develop standard procedures for monitoring and evaluating infrastructure performance, resilience, and community benefits

5.1.3 Establish monitoring systems to track terrace stability, erosion rates, protective capacity against extreme weather events, reduction in service disruption days, reduction in damage costs from extreme events, and to quantify the carbon sequestration potential and GHG emission reduction benefits of ecosystem-based and nature-based solutions

5.1.4 Establish ecological monitoring programs to assess the status of and changes in biodiversity (list of species indicators) habitat quality, and ecosystem services over time

5.1.5 Fully and successfully implement SES strategies and action plans

5.1.6 Fully and successfully implement Gender strategy and action plan

5.2 Inclusive learning, feedback and awareness mechanisms strengthened

5.2.1 Feedback mechanisms (surveys, focus groups, suggestion boxes) capture community input and ensure continuous improvement of project implementation

5.2.3 Organize awareness campaigns, information materials, and interactive forums to educate residents about climate risks, adaptation measures, and the benefits of resilient infrastructure

5.3 Knowledge management, knowledge exchange and capacity development systems strengthened

- 5.3.1 Establish a local knowledge hub or database documenting lessons learned, best practices, and technical expertise to support ongoing capacity development
- 5.3.2 Facilitate mentorship programs pair local professionals with experienced experts in climate adaptation, biodiversity conservation, and sustainable development
- 5.3.3 Engage the Niuean diaspora in knowledge-sharing, training, and advisory roles, including short-term placements or virtual collaboration
- 5.3.4 Provide scholarships, internships, and professional development opportunities for local students and emerging professionals in relevant fields
- 5.3.5 Establish knowledge-sharing platforms with regional and international partners to exchange lessons learned and innovative restoration techniques
- 5.3.6 Conduct capacity assessments and skills gap analysis to identify areas for targeted support and future training needs
- 5.3.7 Fully and successfully implement knowledge management plan
- 5.3.8 South-south cooperation: twinning, exchange visits and annual regional exchange/training workshops including representations from communities, private sector, investors and government across 14 Pacific SIDS
- 5.3.9 Align project website with UNFCCC, delivery of experience and results notes, participation in UNFCCC Conference, and contribution to the Pacific Climate Change Roundtable

Climate and environmental benefits and additionality

This project will lead to considerable direct and indirect total GHG emissions reductions. It is anticipated that the project will directly benefit 1,142 people, which represents 70% of the population of Niue. Indirectly, the entire population of Niue will benefit from this project. Further, the project will lead to 1,608 tCO₂e direct emission reductions over the lifetime of the renewable energy assets (25 years) installed by the project. A total of 60 hectares of coastal terraces will be restored and under improved practice after the end of the project leading to an additional 4,756 tCO₂e over the entire period of accounting of 30 years. Indirect GHG emission reductions from replication are estimated at 4,824 tCO₂e, leading to a total of 11,188 tCO₂e direct and indirect emission reductions as a result of this project. Through the capital injection in the NOW Trust Fund, 31,814,000 hectares of marine protected areas are created or under improved management which will include the conservation of the globally threatened marine species listed in the table below and their habitats.

Common name	Species	IUCN Red List Status
Reptiles		
Hawksbill turtle	<i>Eretmochelys imbricata</i>	CR
Green turtle	<i>Chelonia mydas</i>	EN
Olive small scaled skink	<i>Emoia lawesi</i>	EN
Loggerhead turtle	<i>Caretta caretta</i>	VU
Fish		
Oceanic Whitetip shark	<i>Carcharhinus longimanus</i>	CR
Grey Reef Shark	<i>Carcharhinus amblyrhynchos</i>	EN

Flat-tail sea krait	<i>Laticauda schistorhynchus</i>	VU
Silky Shark	<i>Carcharhinus falciformis</i>	VU
Whitetip Reef Shark	<i>Triaenodon obesus</i>	NT
Yellowfin Tuna	<i>Thunnus albacares</i>	NT
Striped Marlin	<i>Kajikia audax</i>	NT
Invertebrates		
Pineapple Sea Cucumber	<i>Thelenota ananas</i>	EN
Coconut crab	<i>Birgus latro</i>	VU
Small Giant Clam	<i>Tridacna maxima</i>	NT

These climate and environmental benefits would not be achieved in the absence of the project, as current investments and national capacities are insufficient to systematically integrate climate risk governance, climate-resilient and low-emission infrastructure, and ecosystem conservation and adaptation at scale. By overcoming institutional, technical, and financing barriers through an integrated approach, the project enables emission reductions, ecosystem conservation and restoration, and resilience outcomes that go beyond business-as-usual development trajectories and thus ensures sustainability over the long term.

[1] https://openaccess.wgtn.ac.nz/articles/thesis/A_New_Way_Niue/17134685/1/files/31684997.pdf

[1] [NIUE NDC 3.0.pdf](#)

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

No

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

The project will actively cooperate with ongoing and planned initiatives described in Table 2. Cooperation and coordination efforts will include leveraging improved climate information services from the CIS-PAC5 project and seeking synergies with a planned Adaptation Fund project on invasive species management. Collaboration with the Global Program on Climate-Resilient Renewable Energy Systems will focus on knowledge exchange, alignment of technical approaches, and opportunities for private sector participation. The project will further build on ocean conservation and sustainable finance mechanisms advanced through the Blue Nature Alliance and the NOW Trust, while complementing an ongoing GCF project on climate resilient tuna fisheries to enhance a resilient, ocean-positive blue economy in which sustainable fisheries reinforce ocean protection and conservation alongside broader development objectives. During the PPG phase, these linkages will be systematically explored and elaborated in detail.

Implementation arrangements will be further defined in the PPG phase.

Core Indicators

Indicator 2 Marine protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
31814000	0	0	0

Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
31814000	0	0	0

Name of the Protected Area	WDP A ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Niue Nukutulu ea Multiple-Use Marine Park		Protected area with sustainable use of natural resources	31,814,000.00						

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
60	0	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Natural grass	60.00			

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	6364	0	0	0
Expected metric tons of CO₂e (indirect)	4824	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	4,756			
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting	2027			
Duration of accounting	30			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	1,608			
Expected metric tons of CO₂e (indirect)	4,824			
Anticipated start year of accounting	2027			
Duration of accounting	20			

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
Solar Photovoltaic	0.10			

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	560			
Male	582			
Total	1142	0	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

The indicator on beneficiaries is estimated using population figures from the latest 2022 census for the eight target villages in the western part of Niue. For the ecosystem-related indicator, it is assumed that each coastal terrace covers approximately 4 hectares, with a total of 15 terraces to be restored under the project, corresponding to an estimated restoration area of 60 hectares.

Through the capital injection to in the NOW Trust Fund, 31,814,000 hectares of marine protected areas will be brought under improved management effectiveness in the Niue Moana Mahu Marine Protected Area and the Niue Nukutuluea Multiple-Use Marine Park.

Following a preliminary assessment at PIF stage, these figures do not represent an overlap with areas that may also be counted under other GEF projects in this same Work Program cycle. For example GEF 10769 Robust sustainable tourism and agriculture sectors in Niue supported by biodiversity mainstreaming and sustainable land management focuses on terrestrial biodiversity conservation and is mainly located on the eastern part of the island, while this proposal's coastal restoration effort will be on the western part of the island and in the marine reserves and Mahu Moana.

It should be noted that there may be potential overlap with other relevant regional initiatives such as the new GEF 12069 Unlocking Blue Pacific Prosperity (UBPP) through the Ocean Flagship project which will also have activities in marine conservation. However, in both cases (for the UBPP and component 4 of this proposal), CI is the IA and it will be ensured that there will be no overlap or double counting of indicators.

For GHG emission reduction estimates, the methodology follows the GEF-8 Results Measurement Framework and assumes diesel generation as the baseline for electricity supply. The project applies the following assumptions:

One kWh of electricity using diesel requires 0.32 liters of fuel. By deploying solar PV systems, the average annual electricity generated per installation is expected to replace a corresponding amount of diesel-generated electricity. This results in estimated annual diesel savings, which are directly linked to the scale and capacity of the installed systems.

The associated emission reductions are calculated using a conversion factor of 2.68 kg of CO₂ per liter of diesel saved.

Direct emissions:

The project will directly support the installation of solar PV/battery systems at five multi-purpose facilities each with a maximum annual load of around 15,000 kWh. Thus, the solar systems directly supported under this project are assumed to produce annual electricity of 75,000 kWh leading to annual diesel savings of 24,000 liters and thus to 1,608 tCO₂e direct emission reductions over the lifetime of the assets (25 years).

Ecosystem restoration and management measures under Component 3 are estimated to deliver significant direct removals of atmospheric carbon through biomass accumulation and soil organic carbon enhancement. Based on EX-ACT modelling for approximately 60 hectares of degraded coastal terraces restored with native vegetation, the Niue AFOLU intervention has an estimated net carbon balance of -4,756 tCO₂e over the 30-year accounting period.

Taken together, the renewable energy interventions (1,608 tCO₂e) and AFOLU-based ecosystem restoration (4,756 tCO₂e) result in approximately 6,364 tCO₂e in total direct GHG emission reductions and removals over the accounting period.

Consequential emissions:

The project will contribute to significant consequential GHG emission reductions from a broader adoption of the outcomes of a GEF project, such as by facilitating climate-risk informed energy investment via the outputs from Component 1. Based on stakeholder consultations and demonstrated interest in scaling the pilot approach, a replication of an additional 15 shelters can be assumed, resulting in estimated indirect GHG emission reductions of 4,824 tCO₂e under the same assumptions and conditions as outlined above. It is thus expected that consequential emissions will be significantly higher, at a factor of 2 to 5 compared to direct emissions. A detailed estimate with underlying methodology will be developed during the formulation stage of the project.

META INFORMATION – SCCF

LDCF false	SCCF-B (Window B) on technology transfer false	SCCF-A (Window-A) on climate Change adaptation true
Is this project LDCF SCCF challenge program? false		
This Project involves at least one small island developing State(SIDS). true		
This Project involves at least one fragile and conflict affected state. false		
This Project will provide direct adaptation benefits to the private sector. true		
This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs). false		
This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below		
Green Climate Fund true	Adaptation Fund true	Pilot Program for Climate Resilience (PPCR) false
This Project has an urban focus. false		
This project will directly engage local communities in project design and implementation true		
This project will support South-South knowledge exchange true		
This Project covers the following sector(s)[the total should be 100%]: *		
Agriculture	0.00%	
Nature-based management	20.00%	
Climate information services	0.00%	
Coastal zone management	20.00%	

Water resources management	20.00%
Disaster risk management	20.00%
Other infrastructure	0.00%
Tourism	20.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise true	Change in mean temperature true	Increased climatic variability true	Natural hazards true
Land degradation true	Coastal and/or Coral reef degradation true	Groundwater quality/quantity false	

CORE INDICATORS – SCCF

	Total	Male	Female	% for Women
CORE INDICATOR 1 Total number of direct beneficiaries	1142	582.00	560.00	49.04%
CORE INDICATOR 2 (a) Area of land managed for climate resilience (ha) (b) Coastal and marine area managed for climate resilience (ha)	60.00 31,814,000.00			
CORE INDICATOR 3 Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	5.00			
CORE INDICATOR 4 Number of people trained or with awareness raised	250	120.00	130.00	52.00%
CORE INDICATOR 5 Number of private sector enterprises engaged in climate change adaptation and resilience	5.00			

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		

Climate	Moderate	Climate change poses increasing risks to Niue’s infrastructure, ecosystems, and livelihoods through sea-level rise, coastal erosion, cyclones, flooding, prolonged dry periods, and heat stress. These impacts affect not only the energy system but also water security, coastal ecosystems, emergency services, and tourism-dependent livelihoods. To mitigate this risk, the project will undertake integrated climate and energy risk assessments, embed climate risk information into planning and infrastructure standards, deploy climate-resilient infrastructure (energy, water, shelters), and restore coastal ecosystems using ecosystem-based adaptation to reduce exposure and sensitivity to climate hazards.
Environmental and Social	Substantial	Environmental and social risks arise from both infrastructure investments and ecosystem interventions. Improper management of batteries, e-waste, and construction materials may pose environmental and health risks, while ecosystem restoration activities require careful management to avoid unintended ecological impacts. Social risks include uneven participation and potential exclusion of vulnerable groups. These risks will be mitigated through full implementation of Environmental and Social Safeguards (SES), Gender Action Plans, safe battery and e-waste management practices, participatory planning, and continuous community engagement and grievance mechanisms.
Political and Governance	Low	Niue benefits from a stable political environment, strong governance arrangements, and oversight through its free association with New Zealand. Risks relate primarily to coordination challenges across small institutions rather than political instability. The project will mitigate these risks by strengthening inter-agency coordination mechanisms, aligning with existing mandates and planning processes, ensuring regular Cabinet-level engagement, and maintaining close oversight through UNDP implementation and reporting arrangements.

INNOVATION

Institutional and Policy	Moderate	Institutional risks stem from limited coordination capacity, overlapping mandates, and fragmented policy frameworks across sectors (e.g. climate, energy, water, infrastructure, environment, tourism). The project will mitigate these risks by institutionalizing climate-risk governance mechanisms, developing standard procedures and tools for planning and permitting, aligning activities with existing workflows, and leveraging regional peer learning and technical assistance to strengthen institutional coherence and policy integration.
Technological	Moderate	The project involves climate-resilient infrastructure, renewable energy systems, smart controls, water technologies, and ecosystem-based adaptation techniques. Risks relate to operation, maintenance, and long-term performance given limited local technical capacity and supply-chain constraints. These risks will be mitigated through robust design standards, stress-testing, hands-on training, demonstration sites, maintenance plans, and procurement arrangements that include warranties, spare parts, and technical support. The project will ensure the procurement of durable, high-quality solar panels, including the application of recognized technical standards, certification requirements, and quality assurance mechanisms. Procurement

		<p>of solar panels, batteries and related components will follow UNDP procurement policies and supplier due-diligence requirements to ensure supply chains are transparent and compliant with international labour standards, including explicit prohibitions on child labour, forced labour and other exploitative practices. The procurement processes and capacities of the executing partner that will be conducting the procurement will be assessed as part of the Partnership Capacity Assessment Tool (PCAT). This includes a procurement assessment. If the results are deemed to insufficiently consider supply chain risks and supplier codes of conduct, then the possibility of having UNDP conduct the procurement for the project will be considered. In case the procurement is performed by the executing partner, requirements including forced labour bidder declarations, qualification requirements and strengthened contractual provision in procurements of solar panels/solar will be included. For procurements performed by UNDP, UNDP's procurement policies require adherence to International Labour Standards, including a bidder declaration referring to the adherence to UN Supplier Code of Conduct (including adherence to International Labour Standards) and the General Terms and Conditions for Contracts: "Standards of Conduct" notes that Contractors and sub-Contractors need to comply with UN Supplier Code of Conduct and UNDP Social and Environmental Standards. UNDP can reject services that do not meet the requirements of the contract. UNDP will monitor the risk and implementation of the "Standards of Conduct" and can terminate a contract if supplier found to be in violation of contractual requirements.</p>
<p>Financial and Business Model</p>	<p>Moderate</p>	<p>Limited fiscal space, absence of diversified financing instruments, and constrained cost-recovery mechanisms pose risks to long-term sustainability. While the project is grant-funded, sustaining infrastructure and ecosystem investments requires improved planning and resource mobilization. The project will mitigate this risk by developing risk-informed investment pipelines, supporting investment roadmaps, strengthening operation and maintenance planning, and aligning with future climate and development finance opportunities. Furthermore, there is a risk that the absence of cost-recovery mechanisms for multi-purpose shelters during non-emergency use may result in operation and maintenance (O&M) costs falling primarily on government budgets, which are constrained, thereby affecting the long-term sustainability of infrastructure investments. This risk will be mitigated through the establishment of a hybrid, locally anchored business and financing model that combines village-managed and/or private sector-supported user-fee mechanisms for commercial and tourism-related use of shelters during non-emergency periods, engagement of tourism operators and local businesses in the use and co-management of facilities to generate revenue streams and increase asset utilization, and access to complementary grant-based financing through mechanisms such as the Niue Ocean Wide (NOW) Trust Fund, which provides long-term, endowment-based support for climate resilience and sustainable tourism initiatives. These measures will be supported by capacity building, operational guidelines, and governance</p>

		arrangements to enable village councils and community committees to manage revenues, maintenance, and service provision effectively.
EXECUTION		
Capacity	Moderate	Implementation risks arise from Niue’s small population, limited staffing, and competing demands on government agencies and village councils. These constraints will affect implementation timelines and post-project sustainability. Furthermore, Niue’s exposure to climate hazard also means that the project execution may be affected by extreme events such as cyclones, droughts etc. The project mitigates these risks through phased implementation, realistic work planning, strong national ownership, targeted capacity building, mentoring, and embedding responsibilities within existing institutions rather than creating parallel systems. Execution risks will be mitigated through proactive planning and coordination, including detailed work scheduling that accounts for cyclone seasons and weather windows, strong inter-agency coordination, and adaptive timeline management to minimize delays and disruptions to field implementation.
Fiduciary	Moderate	Fiduciary risks relate to procurement capacity, financial management, and oversight within small national institutions. These risks will be mitigated through UNDP fiduciary oversight, adherence to international procurement and financial standards, transparent reporting, and capacity strengthening for national counterparts.
Stakeholder	Moderate	Risks include limited donor base and coordination among government agencies, utilities, village councils, communities, and the private sector, as well as potential resistance to new technologies or practices. The project mitigates these risks through structured stakeholder engagement, participatory planning, awareness campaigns, community feedback mechanisms, and strengthened roles for village councils and local committees.
Other	Moderate	Niue’s remoteness exposes the project to risks related to shipping delays, supply-chain disruptions, and cost fluctuations. The project will mitigate these risks by careful procurement planning, use of pre-qualified suppliers, early ordering of critical equipment, and leveraging lessons learned from previous projects in Niue and the Pacific region.
Overall Risk Rating	Moderate	The overall risk profile of NIUE-IECI is assessed as moderate. While Niue faces inherent vulnerabilities associated with its small-island context, the project’s integrated design, strong safeguards, institutional strengthening, and adaptive management approach provide robust mitigation measures to manage risks and support successful implementation and sustainability.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

The proposed project is directly aligned with the GEF-8 Climate Change focal area strategy (mitigation components of the project) and the GEF Programming Strategy on Adaptation to Climate for the LCDF and SSCF for the GEF-8 period of July 01 2022 – June 30 2026 (adaptation components of the project).

GEF-8 Climate Change focal area:

The project contributes to Pillar I: Promote innovation, technology development and transfer, and enabling policies for mitigation options with systemic impacts, with strong relevance to Objectives 1.1 (Accelerate the efficient use of energy and materials) , 1.2 (Enable the transition to decarbonized power systems) and 1.4 (Promote Nature-based Solutions with high mitigation potential).

Through Component 1, the project strengthens governance, planning, and regulatory frameworks to mainstream climate and energy risk considerations into national decision-making, infrastructure standards, and investment prioritization. This creates the enabling policy environment required for the sustained deployment and integration of renewable energy, storage, and demand-side efficiency measures, while reducing lock-in to fossil fuel-based systems.

Through Component 2, the project directly supports mitigation outcomes by deploying climate-resilient, low-emission energy and water systems in multi-purpose community and tourism facilities. Investments in solar PV, battery storage, energy-efficient technologies, and smart energy management systems reduce dependence on imported diesel, lower lifecycle GHG emissions, and demonstrate scalable models for distributed renewable energy systems in island settings. By pairing infrastructure deployment with local operation, maintenance, and governance capacity, the project supports effective technology transfer, reduces performance risks, and enhances replication potential across Niue and other Pacific SIDS.

Through Component 3, the project advances nature-based solutions with high mitigation potential by restoring and sustainably managing Niue’s coastal terraces and associated ecosystems that function as important natural carbon sinks while also delivering critical adaptation and biodiversity benefits. By rehabilitating degraded coastal vegetation, stabilizing soils, managing invasive species, and strengthening natural barriers, the component reduces ongoing carbon loss from ecosystem degradation and enhances long-term CO₂ sequestration in biomass and soils, consistent with GEF-8 Objective 1.4. These interventions are aligned with Niue’s climate strategies as reflected in its NDC and build on ridge-to-reef and ecosystem management approaches already prioritized nationally. Coupled with community stewardship, capacity building, and integration of ecosystem-based adaptation into local and national planning frameworks, this component will deliver sustained mitigation co-benefits alongside improved livelihoods, coastal protection, and ecosystem resilience, with strong potential for replication across similar Pacific SIDS contexts.

The project further aligns with GEF-8 priorities by embedding mitigation within system-level transformation, rather than isolated technology deployment. Renewable energy investments are

complemented by risk-informed planning, climate-proof technical standards, institutional strengthening, and learning systems, ensuring that mitigation gains are durable and resilient to climate shocks. This integrated approach directly addresses structural barriers to decarbonization in small island energy systems, including underinvestment, fragmented governance, and limited technical capacity.

In addition, the project is consistent with elements of the GEF-8 Focal Area Set-Aside, particularly zero-carbon and climate-resilient built environments, energy access and reliability for communities and economic sectors.

GEF-8 Biodiversity Focal Area:

Through Component 4, the project contributes to GEF-8 BD Objective 1: Reduce threats to globally significant BD and Objective 3: Mainstream BD into ocean governance and sustainable finance. By capitalizing the NOW trust, Component 4 reduces threats to biodiversity arising from inconsistent operational funding and reliance on short-term project finance as the trust will provide long-term sustained investment into the areas (BD Objective 1). Component 4 ensures mainstreaming of biodiversity into Niue's MPA network by embedding sustainable financing via the capitalization of the NOW trust (BD Objective 3).

SCCF Programming strategy

The project is directly aligned to both SCCF priority areas, "Priority Area 1: Supporting the Adaptation Needs of Small Island Developing States (SIDS)" and "Priority Area 2: Strengthening Technology Transfer, Innovation and Private Sector Engagement"

Priority Area 1

The project directly responds to this priority by targeting systemic climate risks that disproportionately affect SIDS, including coastal erosion, extreme events (precipitation, cyclones), storm surge, ecosystem degradation, service disruptions, and limited adaptive capacity. Through Component 3, the project delivers ecosystem-based adaptation (EbA) interventions to restore and sustainably manage vulnerable coastal terraces and ecosystems, strengthening natural protection against extreme weather events, sea-level rise, and erosion while enhancing biodiversity and ecosystem services. These measures reduce exposure of communities, infrastructure, and livelihoods to climate hazards, consistent with SCCF priorities such as nature-based solutions, enhanced resilience of public infrastructure, and mainstreaming climate resilience into planning frameworks. Complementary governance (Component 1) and infrastructure (Component 2) investments ensure that EbA is embedded within a broader, integrated resilience strategy rather than implemented as isolated pilots.

Priority Area 2

The project also aligns with SCCF's second priority by promoting the transfer and deployment of practical adaptation technologies and approaches suited to small island contexts. Under Components 2 and 3, the project pilots and scales climate-resilient water, energy, and shelter systems, alongside innovative ecosystem restoration techniques adapted to local geomorphology and ecological conditions. These interventions are paired with technical assistance, community stewardship models, and capacity building to ensure uptake, sustainability, and replication. Opportunities for engagement of local service providers, MSMEs, and regional partners are embedded in implementation, while Component 4 strengthens learning, South-South cooperation, and knowledge exchange across Pacific SIDS, an explicit SCCF priority for regional adaptation programming.

Across both priority areas, the project emphasizes institutional learning, inclusive participation, and technology transfer, ensuring that adaptation solutions are not only implemented but institutionalized and scaled. By combining EbA, resilient infrastructure, enabling governance, and knowledge systems in a single integrated programme, the project reflects the SCCF's comparative advantage in supporting transformational, multi-country adaptation action in SIDS, delivering durable resilience benefits in the face of accelerating climate risks.

Contribution of the targets of the Kunming-Montreal Global Biodiversity Framework

Key KMGBF Targets Most Relevant for Niue in the context of this project are:

1. Plan and Manage all Areas To Reduce Biodiversity Loss (Target 1): Ensure that all areas are under participatory, integrated, and biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.

2. Restore degraded ecosystems (Target 2): By 2030, countries should restore at least 30% of degraded ecosystems on land and in marine areas to improve ecosystem functions and biodiversity.

This includes restoration of coral reefs, coastal habitats, and forest ecosystems that are critical for island resilience, in the case of this project coastal terraces.

4. Conserve 30% of Land, Waters and Seas (Target 3): To ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

5. Reduce threats to biodiversity (Targets 5–8)

These targets focus on:

- Sustainable use and harvesting of wild species
- Control of invasive species (a major issue for islands)
- Reduction of pollution and plastic waste
- Addressing climate change impacts through nature-based solutions.

6. Sustainable use and benefit sharing (Targets 9–13)

Countries are encouraged to manage natural resources sustainably while ensuring that benefits from genetic resources and biodiversity are shared fairly.

7. Financing and implementation (Targets 18–23)

These targets aim to mobilize financial resources, strengthen capacity, improve data and monitoring, and ensure inclusive participation—especially of local communities, women, and Indigenous peoples—in biodiversity decision-making.

For the Niue-IECI, implementing the GBF will focus on these actions to help safeguard biodiversity while supporting climate resilience and sustainable livelihoods for the island community.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

UNDP, in partnership with the Government of Niue, has undertaken extensive stakeholder consultations over the past two years through a series of missions, workshops, and cross-sector engagements to inform the design of the proposed project. These consultations enabled a comprehensive review of lessons learned from ongoing and completed initiatives, the identification of key gaps and priorities, and the generation of critical inputs for project development. The concept was initially shaped during a mission in September 2024 on the inception of the UNDP Blue Economy Strategy for Niue and subsequently refined through further dialogue at the Niue National Energy Summit, which advanced discussions on energy transition, climate action, resilience, and inclusive development. Targeted consultations on the GEF-8 concept were held with key government stakeholders, including the Director of Environment and Operational Focal Point, the Minister of Finance, the Director of Agriculture and Fisheries, and the team of the Niue Ocean Wide (NOW) Trust Fund. The concept was also presented to the Niue Chamber of Commerce, private sector tourism operators, and partners such as the Blue Nature Alliance and Conservation International.

Civil society organisations and local communities have played a central role in the design process, contributing directly to the development of project components, outputs, and activities reflected in this PIF. Key contributors included Tofia Niue (environmental NGO), members of the Niue United Association of NGOs (NIUANGO), the Niue Tolomaki Auloa Association (NTAA), representing persons with disabilities, and the Councils of Women from Avatele and Hikutavake, among others.

Consultations conducted during the Blue Economy Inception Phase and the Niue National Energy Summit established a strong and inclusive foundation for the GEF Niue Infrastructure, Ecosystems and Communities Integrated Project. These engagements enhanced stakeholder understanding of the sustainable blue economy and critical energy challenges, while systematically reviewing existing initiatives to capture lessons learned

and avoid duplication. They also identified core priorities, including strengthening governance, ensuring practical and scalable implementation, and addressing human and financial resource constraints associated with Niue’s small and mobile population. Key thematic areas that emerged include climate resilience, sustainable infrastructure, and the integration of traditional knowledge, cultural heritage, and cross-sector collaboration within a unified development framework. Engagements with the Chamber of Commerce, tourism operators, civil society, and other stakeholders further identified opportunities for partnerships in sustainable ocean-based tourism, biodiversity conservation, and community-led initiatives, which are now embedded within the project design. In addition, in early 2026, the Department of Environment conducted a series of stakeholder consultations on the proposed project with the key communities targeted in this project including Tamakautoga village, Alofi South Village, Alofi North Village, Makefu Village, Tuapa Village and Namukulu village.

Importantly, the consultations underscored the need for consistent and strategic use of data to inform decision-making and track progress, alongside a strong commitment to gender responsiveness. Insights on the roles, contributions, and challenges faced by women in climate resilience, the ocean economy, and biodiversity conservation have been incorporated to ensure inclusive and equitable outcomes. Taken together, these findings have shaped a holistic, participatory, and evidence-based project design that integrates infrastructure development, ecosystem protection, tourism sector support, and community resilience in alignment with Niue’s long-term sustainable development objectives.

The list of names of dates of consultations is provided in the table below:

Mission/Event	Stakeholder	Name	Date(s)
UNDP Blue Economy Project Inception and GEF8 project concept consultations	Department of Environment	Mr Haden Talagi	09–15 September 2024
	Department of Agriculture, Forestry and Fisheries	Mr Poi Okesene	
	Ministry of Finance	Hon. Crossley Tatui	
	Tofia Niue (Environmental NGO)	Ms Coral Pasisi	
	Niue-Ocean-Wide (NOW) Trust (PPP)	Mr. Brendon Pasisi	
	Niue Chamber of Commerce (NCC)	Ms Catherine Papani (CEO)	
	Niue Island United Association of NGOs (NIUANGO)	Ms Jamal Talagi	
	Hikutavake Council of Women	Ms Pamela Togiakona Fatani	

	Avatele Council of Women	Ms Loseligi T. Siakimotu	
	Niue Tolomaki Auloa Association (NTAA- People with Disability organisation)	Ms Lava Mokalei	
High-level discussions on GEF programming	Prime Minister of Niue	Hon. Dalton Tagelagi	15–22 March 2025
	Acting Minister of Natural Resources	Mr Emani Fakotiamanava-Lui	15–22 March 2025
	Department of Agriculture	Mr Poi Okesene (2nd meeting)	15–22 March 2025
	Office of the Secretary to Government of Niue	Ms Peleni Talagi	15–22 March 2025
Niue National Energy Summit 2025 and high-level bilateral meetings to advance dialogue on energy transition, climate action, and inclusive development.	Prime Minister of Niue	Hon. Dalton Tagelagi (2nd meeting)	07–10 July 2025
	Minister of Social Services	Hon. Sonya Talagi	07–10 July 2025
	Minister of Natural Resources	Hon. Mona AINU'U	07–10 July 2025
	Niue Power Corporation	Mr Clinton Chapman	07–10 July 2025
	Office of the Regulator	Mr Andre Siohane	07–10 July 2025
	Niue NOW Trust Fund	Ms Coral Pasisi	07–10 July 2025
	Niue Chamber of Commerce	Mr Sefeti Fatiaki Adriana	07–10 July 2025
	Women leadership in energy and climate	Ms Carol Nelson	07–10 July 2025
Detailed discussions on project scope with Niue GEF Operational Focal Point		Mr Haden Talagi (OFP clearance)	17 November 2025
	Department of Environment	Mr Haden Talagi (second meeting)	04 December 2025
Stakeholder review of PIF including proposed components, outcomes, outputs and activities	Project stakeholders	Tourism, Utility, Project Management	07–11 December 2025
Final review of PIF by GEF OFP	Department of Environment	GEF OFP (Haden Talagi)	19–23 December 2025
	Tamakautoga village		21-22 February 2026

Stakeholder consultations on the project by Department of Environment	Alofi South village	Community participants and village council members	
	Alofi North village		
	Makefu village		
	Tuapa village		
	Namukulu village.		
Final consultations on Project PIF (virtual) with implementing partners	Tofia Niue (environmental NGO)	Ms Coral Pasisi	6 -14 April 2026
	Niue-Ocean-Wide (NOW) Trust	Mr. Brendon Pasisi	
	Conservation International (CI)	Ms Orissa Samaroo and Mr. Michael McGreevey	

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
UNDP	GET	Niue	Climate Change	CC STAR Allocation: CCM- 1-2	Grant	2,164,730.00	205,647.00	2,370,377.00
UNDP	GET	Niue	Climate Change	CC STAR Allocation: CCM- 1-4	Grant	500,000.00	47,499.00	547,499.00
CI	GET	Niue	Biodiversity	BD STAR Allocation: BD-1	Grant	2,685,634.00	241,704.00	2,927,338.00
UNDP	SCCF- A	Niue	Climate Change	SCCF-A Country allocation	Grant	2,681,395.00	254,731.00	2,936,126.00
Total GEF Resources (\$)						8,031,759.00	749,581.00	8,781,340.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

200000

PPG Agency Fee (\$)

18660

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
UNDP	GET	Niue	Climate Change	CC STAR Allocation: CCM- 1-2	Grant	60,927.00	5,787.00	66,714.00
UNDP	GET	Niue	Climate Change	CC STAR Allocation: CCM- 1-4	Grant	14,073.00	1,337.00	15,410.00
CI	GET	Niue	Biodiversity	BD STAR Allocation: BD-1	Grant	66,666.00	5,996.00	72,662.00

UNDP	SCCF-A	Niue	Climate Change	SCCF-A Country allocation	Grant	58,334.00	5,540.00	63,874.00
Total PPG Amount (\$)						200,000.00	18,660.00	218,660.00

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
UNDP	GET	Niue	Climate Change	CC STAR Allocation	1,500,000.00
UNDP	GET	Niue	Biodiversity	BD STAR Allocation	1,500,000.00
CI	GET	Niue	Biodiversity	BD STAR Allocation	1,500,000.00
CI	GET	Niue	Land Degradation	LD STAR Allocation	1,500,000.00
Total GEF Resources					6,000,000.00

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
CCM-1-2	GET	2,164,730.00	7844000
CCM-1-4	GET	500,000.00	2000000
BD-1-1	GET	2,685,634.00	7500000
CCA-2-1	SCCF-A	2,681,395.00	9844000
Total Project Cost		8,031,759.00	27,188,000.00

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Donor Agency	Government of New Zealand	Grant	Investment mobilized	11700000
Donor Agency	Asian Development Bank	Grant	Investment mobilized	700000

Donor Agency	Adaptation Fund	Grant	Investment mobilized	4000000
Recipient Country Government	Ministry of Natural Resources - Niue MNR	In-kind	Recurrent expenditures	3288000
Donor Agency	NZ-MFAT	Grant	Investment mobilized	7500000
Total Co-financing				27,188,000.00

Describe how any "Investment Mobilized" was identified

Indicative co-financing for the project is expected from the following sources. First, the planned SPREP Adaptation Fund project "Invasive Species Management for Ecosystem-based Adaptation to Climate Change" for Niue and Tonga (total envelope of about USD 8 million) is expected to contribute approximately USD 4 million to Niue, supporting ecosystem restoration and invasive species management aligned with this project's EbA Component. Second, the Government of New Zealand has announced a USD 11.7 million pledge for renewable energy investments in Niue, which will directly complement this project's climate-resilient, low-emission infrastructure interventions under Component 2. Third, the Asian Development Bank's Clean and Resilient Energy Development Support Project is providing technical assistance to strengthen institutional, technical, and operational capacity in the energy sector, representing grant-based co-financing to governance and capacity outcomes. In addition, the Government of Niue is expected to provide in-kind co-financing through the allocation of staff time from the Ministry of Natural Resources and other relevant agencies to support project coordination, technical inputs, community engagement, and oversight throughout implementation. Through capitalization of the NOW Trust Fund, combined with a strengthened funding strategy and targeted donor outreach, additional resources will be mobilized from partners including NZ-MFAT, etc. Together, these sources amount to indicative co-financing of USD 27.188 million.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Nancy Bennet	12/19/2025	Nancy Bennet	1917774657	nancy.bennet@undp.org
Project Coordinator	Sergio Quiros Navas	12/19/2025	Sergio Quiros Navas	+639695269056	sergio.quiros.navas@undp.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Haden Talagi	Director, Department of Environment	Ministry of Natural Resources	4/13/2026

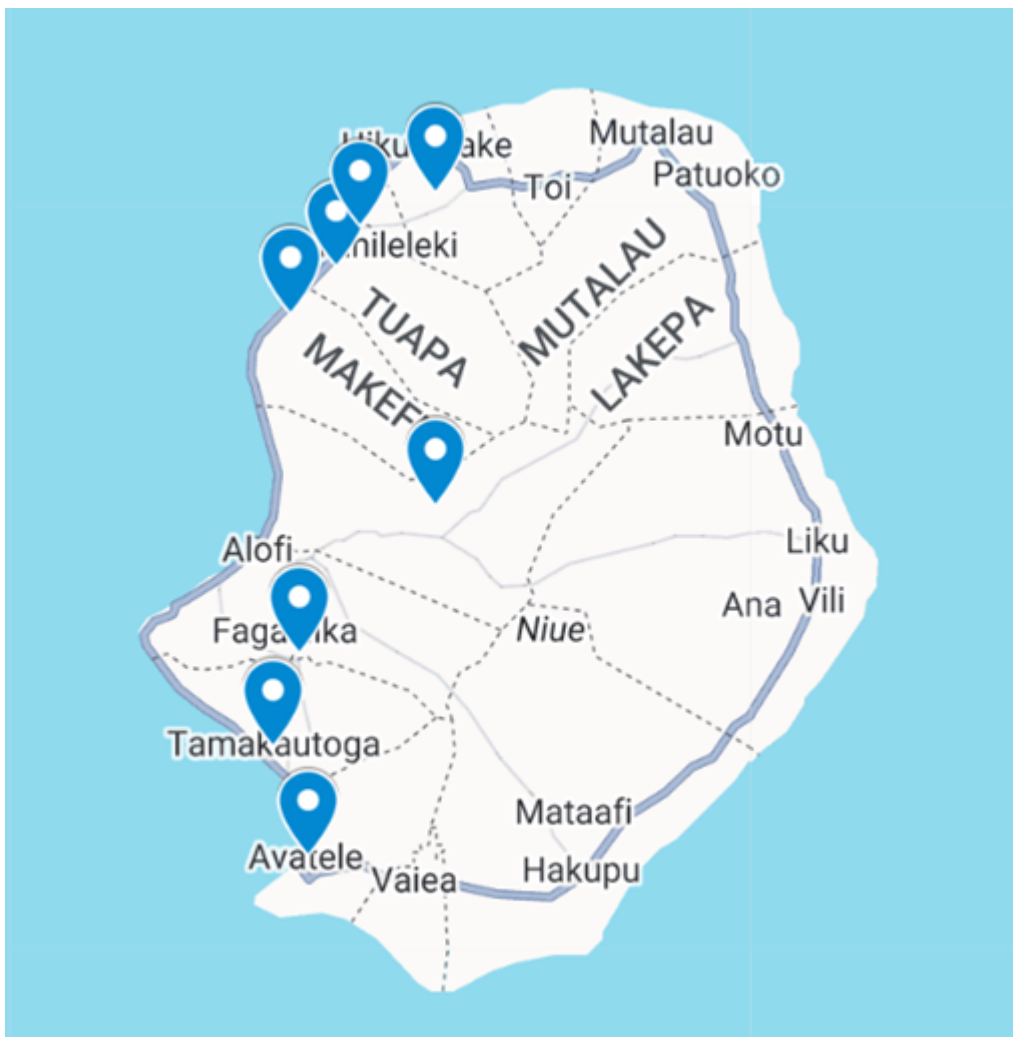
ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place

The project activities target the main eight villages on the west coast of the island:

Name of village	Geolocation
Alofi North	(-169.8803793 -19.04595)
Alofi South (capital)	(-169.9128233 -19.0790016)
Avatele	(-169.9103234 -19.1244456)
Makefu	(-169.9146473 -19.0030083)
Tuapa	(-169.9038217 -18.9927506)
Namukulu	(-169.8984145 -18.9838855)
Hikutavake	(-169.8801189 -18.975521)
Tamakautoga	(-169.9184558 -19.099686)

Figure 1: Project locations



ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

SESP

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Principal Objective 2	Principal Objective 2	Significant Objective 1	Significant Objective 1

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
<input checked="" type="checkbox"/> Influencing models			
	<input checked="" type="checkbox"/> Transform policy and regulatory environments		
	<input checked="" type="checkbox"/> Strengthen institutional capacity and decision-making		
	<input checked="" type="checkbox"/> Convene multi-stakeholder alliances		
	<input checked="" type="checkbox"/> Demonstrate innovative approaches		
	<input type="checkbox"/> Deploy innovative financial instruments		
<input checked="" type="checkbox"/> Stakeholders			
	<input checked="" type="checkbox"/> Indigenous Peoples		
	<input checked="" type="checkbox"/> Private Sector		
		<input type="checkbox"/> Capital providers	
		<input type="checkbox"/> Financial intermediaries and market facilitators	
		<input type="checkbox"/> Large corporations	
		<input checked="" type="checkbox"/> SMEs	
		<input checked="" type="checkbox"/> Individuals/Entrepreneurs	
		<input type="checkbox"/> Non-Grant Pilot	
		<input type="checkbox"/> Project Reflow	
	<input checked="" type="checkbox"/> Beneficiaries		
	<input checked="" type="checkbox"/> Local Communities		
	<input checked="" type="checkbox"/> Civil Society		
		<input checked="" type="checkbox"/> Community Based Organization	
		<input checked="" type="checkbox"/> Non- Governmental	

		Organization	
		<input type="checkbox"/> Academia	
		<input type="checkbox"/> Trade Unions and Workers Unions	
	<input checked="" type="checkbox"/> Type of Engagement		
		<input checked="" type="checkbox"/> Information Dissemination	
		<input checked="" type="checkbox"/> Partnership	
		<input checked="" type="checkbox"/> Consultation	
		<input checked="" type="checkbox"/> Participation	
	<input checked="" type="checkbox"/> Communications		
		<input checked="" type="checkbox"/> Awareness Raising	
		<input checked="" type="checkbox"/> Education	
		<input checked="" type="checkbox"/> Public Campaigns	
		<input checked="" type="checkbox"/> Behavior Change	
		<input checked="" type="checkbox"/> Strategic Communications	
<input checked="" type="checkbox"/> Capacity, Knowledge and Research			
	<input type="checkbox"/> Enabling Activities		
	<input checked="" type="checkbox"/> Capacity Development		
	<input checked="" type="checkbox"/> Knowledge Generation		
		<input checked="" type="checkbox"/> Course	
		<input checked="" type="checkbox"/> Professional development	
		<input checked="" type="checkbox"/> Workshop	
		<input checked="" type="checkbox"/> Seminar	
		<input type="checkbox"/> Master Classes	
		<input checked="" type="checkbox"/> Training	
	<input type="checkbox"/> Targeted Research		
	<input checked="" type="checkbox"/> Learning		
		<input type="checkbox"/> Theory of Change	
		<input checked="" type="checkbox"/> Adaptive Management	
		<input checked="" type="checkbox"/> Indicators to Measure Change	
	<input checked="" type="checkbox"/> Innovation		
	<input checked="" type="checkbox"/> Knowledge Exchange		
		<input checked="" type="checkbox"/> South-South	
		<input checked="" type="checkbox"/> Field Visit	
		<input type="checkbox"/> North-North	
		<input checked="" type="checkbox"/> Peer-to-Peer	
		<input type="checkbox"/> Conference	
		<input type="checkbox"/> Exhibit	

		<input checked="" type="checkbox"/> Twinning	
<input checked="" type="checkbox"/> Gender Equality			
	<input checked="" type="checkbox"/> Gender Mainstreaming		
		<input checked="" type="checkbox"/> Beneficiaries	
		<input checked="" type="checkbox"/> Women groups	
		<input checked="" type="checkbox"/> Sex- disaggregated indicators	
		<input checked="" type="checkbox"/> Gender- sensitive indicators	
	<input checked="" type="checkbox"/> Gender results areas		
		<input checked="" type="checkbox"/> Access and control over natural resources	
		<input checked="" type="checkbox"/> Participation and leadership	
		<input checked="" type="checkbox"/> Access to benefits and services	
		<input checked="" type="checkbox"/> Capacity development	
		<input checked="" type="checkbox"/> Awareness raising	
		<input checked="" type="checkbox"/> Knowledge generation and Exchange	
<input checked="" type="checkbox"/> Focal Areas/Theme			
	<input checked="" type="checkbox"/> Sustainable Development Goals		
	<input type="checkbox"/> Integrated Programs		
		<input type="checkbox"/> Commodity Supply Chains (1Good Growth Partnership)	
			<input type="checkbox"/> Sustainable Commodities Production
			<input type="checkbox"/> Deforestation- free Sourcing
			<input type="checkbox"/> Financial Screening Tools
			<input type="checkbox"/> High Conservation Value Forests

			<input type="checkbox"/> High Carbon Stocks Forests
			<input type="checkbox"/> Soybean Supply Chain
			<input type="checkbox"/> Oil Palm Supply Chain
			<input type="checkbox"/> Beef Supply Chain
			<input type="checkbox"/> Smallholder Farmers
			<input type="checkbox"/> Adaptive Management
		<input type="checkbox"/> Food Security in Sub-Sahara Africa	
			<input type="checkbox"/> Resilience (climate and shocks)
			<input type="checkbox"/> Sustainable Production Systems
			<input type="checkbox"/> Agroecosystems
			<input type="checkbox"/> Land and Soil Health
			<input type="checkbox"/> Diversified Farming
			<input type="checkbox"/> Integrated Land and Water Management
			<input type="checkbox"/> Smallholder Farming
			<input type="checkbox"/> Small and Medium Enterprises
			<input type="checkbox"/> Crop Genetic Diversity
			<input type="checkbox"/> Food Value Chains
			<input type="checkbox"/> Gender Dimensions
			<input type="checkbox"/> Multi- stakeholder Platforms
		<input type="checkbox"/> Food Systems, Land Use and Restoration	
			<input type="checkbox"/> Sustainable Food Systems
			<input type="checkbox"/> Landscape Restoration
			<input type="checkbox"/> Sustainable Commodity Production
			<input type="checkbox"/> Comprehensive Land Use Planning
			<input type="checkbox"/> Integrated Landscapes
			<input type="checkbox"/> Food Value Chains

			<input type="checkbox"/> Deforestation- free Sourcing
			<input type="checkbox"/> Smallholder Farmers
		<input type="checkbox"/> Sustainable Cities	
			<input type="checkbox"/> Integrated urban planning
			<input type="checkbox"/> Urban sustainability framework
			<input type="checkbox"/> Transport and Mobility
			<input type="checkbox"/> Buildings
			<input type="checkbox"/> Municipal waste management
			<input type="checkbox"/> Green space
			<input type="checkbox"/> Urban Biodiversity
			<input type="checkbox"/> Urban Food Systems
			<input type="checkbox"/> Energy efficiency
			<input type="checkbox"/> Municipal Financing
			<input type="checkbox"/> Global Platform for Sustainable Cities
			<input type="checkbox"/> Urban Resilience
	<input checked="" type="checkbox"/> Biodiversity		
		<input checked="" type="checkbox"/> Protected Areas and Landscapes	
			<input checked="" type="checkbox"/> Terrestrial Protected Areas
			<input checked="" type="checkbox"/> Coastal and Marine Protected Areas
			<input type="checkbox"/> Productive Landscapes
			<input type="checkbox"/> Productive Seascapes
			<input checked="" type="checkbox"/> Community Based Natural Resource Management
		<input checked="" type="checkbox"/> Mainstreaming	
			<input type="checkbox"/> Extractive Industries (oil, gas, mining)
			<input type="checkbox"/> Forestry (Including HCVF and REDD+)
			<input checked="" type="checkbox"/> Tourism
			<input type="checkbox"/> Agriculture & agrobiodiversity
			<input type="checkbox"/> Fisheries
			<input checked="" type="checkbox"/> Infrastructure

			<input type="checkbox"/> Certification (National Standards)
			<input type="checkbox"/> Certification (International Standards)
		<input checked="" type="checkbox"/> Species	
			<input type="checkbox"/> Illegal Wildlife Trade
			<input type="checkbox"/> Threatened Species
			<input type="checkbox"/> Wildlife for Sustainable Development
			<input type="checkbox"/> Crop Wild Relatives
			<input type="checkbox"/> Plant Genetic Resources
			<input type="checkbox"/> Animal Genetic Resources
			<input type="checkbox"/> Livestock Wild Relatives
			<input checked="" type="checkbox"/> Invasive Alien Species (IAS)
		<input checked="" type="checkbox"/> Biomes	
			<input checked="" type="checkbox"/> Mangroves
			<input type="checkbox"/> Coral Reefs
			<input type="checkbox"/> Sea Grasses
			<input type="checkbox"/> Wetlands
			<input type="checkbox"/> Rivers
			<input type="checkbox"/> Lakes
			<input type="checkbox"/> Tropical Rain Forests
			<input type="checkbox"/> Tropical Dry Forests
			<input type="checkbox"/> Temperate Forests
			<input type="checkbox"/> Grasslands
			<input type="checkbox"/> Paramo
			<input type="checkbox"/> Desert
		<input type="checkbox"/> Financial and Accounting	
			<input type="checkbox"/> Payment for Ecosystem Services
			<input type="checkbox"/> Natural Capital Assessment and Accounting
			<input type="checkbox"/> Conservation Trust Funds
			<input type="checkbox"/> Conservation Finance

		<input type="checkbox"/> Supplementary Protocol to the CBD	
			<input type="checkbox"/> Biosafety
			<input type="checkbox"/> Access to Genetic Resources
			Benefit Sharing
	<input type="checkbox"/> Forests		
		<input type="checkbox"/> Forest and Landscape Restoration	
			<input type="checkbox"/> REDD/REDD+
		<input type="checkbox"/> Forest	
			<input type="checkbox"/> Amazon
			<input type="checkbox"/> Congo
			<input type="checkbox"/> Drylands
	<input checked="" type="checkbox"/> Land Degradation		
		<input checked="" type="checkbox"/> Sustainable Land Management	
			<input checked="" type="checkbox"/> Restoration and Rehabilitation of Degraded Lands
			<input checked="" type="checkbox"/> Ecosystem Approach
			<input type="checkbox"/> Integrated and Cross-sectoral approach
			<input checked="" type="checkbox"/> Community- Based NRM
			<input type="checkbox"/> Sustainable Livelihoods
			<input checked="" type="checkbox"/> Income Generating Activities
			<input type="checkbox"/> Sustainable Agriculture
			<input type="checkbox"/> Sustainable Pasture Management
			<input type="checkbox"/> Sustainable Forest/Woodland Management
			<input type="checkbox"/> Improved Soil and Water Management Techniques
			<input type="checkbox"/> Sustainable Fire Management
			<input type="checkbox"/> Drought Mitigation/Early Warning
		<input type="checkbox"/> Land Degradation Neutrality	
			<input type="checkbox"/> Land Productivity

			<input type="checkbox"/> Land Cover and Land cover change
			<input type="checkbox"/> Carbon stocks above or below ground
		<input type="checkbox"/> Food Security	
	<input checked="" type="checkbox"/> International Waters		
		<input type="checkbox"/> Ship	
		<input type="checkbox"/> Coastal	
		<input type="checkbox"/> Freshwater	
			<input type="checkbox"/> Aquifer
			<input type="checkbox"/> River Basin
			<input type="checkbox"/> Lake Basin
		<input type="checkbox"/> Learning	
		<input type="checkbox"/> Fisheries	
		<input type="checkbox"/> Persistent toxic substances	
		<input type="checkbox"/> SIDS : Small Island Dev States	
		<input type="checkbox"/> Pollution	
			<input type="checkbox"/> Persistent toxic substances
			<input type="checkbox"/> Plastics
			<input type="checkbox"/> Nutrient pollution from all sectors except wastewater
			<input type="checkbox"/> Nutrient pollution from Wastewater
		<input type="checkbox"/> Transboundary Diagnostic Analysis and Strategic Action	
		Plan preparation	
		<input type="checkbox"/> Strategic Action	
		Plan Implementation	
		<input type="checkbox"/> Areas Beyond National Jurisdiction	
		<input checked="" type="checkbox"/> Large Marine Ecosystems	
		<input type="checkbox"/> Aquaculture	
		<input checked="" type="checkbox"/> Marine Protected Area	
		<input type="checkbox"/> Biomes	
			<input type="checkbox"/> Mangrove
			<input type="checkbox"/> Coral Reefs
			<input type="checkbox"/> Seagrasses

			<input type="checkbox"/> Polar Ecosystems
			<input type="checkbox"/> Constructed Wetlands
	<input type="checkbox"/> Chemicals and Waste		
		<input type="checkbox"/> Mercury	
			<input type="checkbox"/> Artisanal and Scale Gold Mining
			<input type="checkbox"/> Coal Fired Power Plants
			<input type="checkbox"/> Coal Fired Industrial Boilers
			<input type="checkbox"/> Cement
			<input type="checkbox"/> Non-Ferrous Metals Production
		<input type="checkbox"/> Ozone	
		<input type="checkbox"/> Persistent Organic Pollutants	
			<input type="checkbox"/> Unintentional Persistent Organic Pollutants
			<input type="checkbox"/> New Persistent Organic Pollutants
			<input type="checkbox"/> Polychlorinated Biphenyls
		<input type="checkbox"/> Sound Management of chemicals and Waste	
		<input type="checkbox"/> Waste Management	
			<input type="checkbox"/> Hazardous Waste Management
			<input type="checkbox"/> Industrial Waste
			<input type="checkbox"/> e-Waste
		<input type="checkbox"/> Emissions	
		<input type="checkbox"/> Disposal	
		<input type="checkbox"/> Plastics	
		<input type="checkbox"/> Eco-Efficiency	
		<input type="checkbox"/> Pesticides	
			<input type="checkbox"/> DDT - Vector Management
			<input type="checkbox"/> DDT - Other
		<input type="checkbox"/> Industrial Emissions	
		<input type="checkbox"/> Open Burning	
		<input type="checkbox"/> Best Available Technology / Best Environmental Practices	

		<input type="checkbox"/> Green Chemistry	
	<input checked="" type="checkbox"/> Climate Change		
		<input checked="" type="checkbox"/> Climate Change Adaptation	
			<input checked="" type="checkbox"/> Climate Finance
			<input type="checkbox"/> Least Developed Countries
			<input checked="" type="checkbox"/> Small Island Developing States
			<input checked="" type="checkbox"/> Disaster Risk Management
			<input checked="" type="checkbox"/> Sea-level rise
			<input checked="" type="checkbox"/> Climate Resilience
			<input checked="" type="checkbox"/> Climate information
			<input checked="" type="checkbox"/> Ecosystem- based Adaptation
			<input checked="" type="checkbox"/> Adaptation Tech Transfer
			<input type="checkbox"/> National Adaptation Programme of Action
			<input type="checkbox"/> National Adaptation Plan
			<input checked="" type="checkbox"/> Mainstreaming Adaptation
			<input checked="" type="checkbox"/> Private Sector
			<input type="checkbox"/> Innovation
			<input type="checkbox"/> Complementarity
			<input checked="" type="checkbox"/> Community- based Adaptation
			Livelihoods
		<input checked="" type="checkbox"/> Climate Change Mitigation	
			<input checked="" type="checkbox"/> Agriculture, Forestry, and other Land Use
			<input type="checkbox"/> Energy Efficiency
			<input type="checkbox"/> Sustainable Urban Systems and Transport
			<input checked="" type="checkbox"/> Technology Transfer
			<input checked="" type="checkbox"/> Renewable Energy
			<input type="checkbox"/> Financing
		<input type="checkbox"/> United Nations Framework on Climate Change	
			<input type="checkbox"/> Nationally Determined Contribution

			<input type="checkbox"/> Paris Agreement
			<input type="checkbox"/> Enabling Activities
			<input type="checkbox"/> Capacity Building Initiative for Transparency
<input type="checkbox"/> Fragile and Conflict-Affected Situations			
	<input type="checkbox"/> Conflict		
	<input type="checkbox"/> Institutional and Social Fragility		