



COOK ISLANDS
CLIMATE CHANGE COUNTRY PROGRAMME
2018 - 2030

Aligning the Cook Islands Country Programme
with the Development Agenda through Climate
Financing

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ACRONYMS

ADB	Asian Development Bank
BCI	Bank of the Cook Islands
CCCI	Climate Change Cook Islands
CI NIIP	Cook Islands National Infrastructure Investment Plan
CPPO	Central Policy and Planning Office
CIREC	Cook Islands Renewable Energy Chart
CSO	Civil Society Organisations
FRDP	Framework for Resilient Development in the Pacific
GCF	Green Climate Fund
GEF	Global Environment Fund
GDP	Gross Domestic Product
GHG	Green House Gases
INDC	Intended Nationally Determined Contributions
JNAP	Joint National Action Plan
MFEM	Ministry of Finance and Economic Management
NDA	National Designated Authority
NES	National Environment Service
NGOs	Non-government Organisations
NSDC	National Sustainable Development Commission
NSDP	National Sustainable Development Plan
ODA	Overseas Development Assistance
OPM	Office of the Prime Minister
SOE	State of the Environment
SIDs	Small Islands Developing States
TAU	Te Aponga Uira
TAG	Technical Advisory Group
TNC	Third National Communication to the UNFCCC
UNFCCC	United Nations Framework Convention on Climate Change
2NC	Second National Communication to the UNFCCC

COUNTRY PROGRAMME OVERVIEW

This Country Program was developed as part of the Green Climate Fund (GCF) Readiness and Preparatory Support program. The key objective of the Country Programme is to outline the priorities that can be supported by the GCF and other development partners to progress the paradigm shift in the Cook Islands to achieve low emissions and climate resilient development. It serves as a roadmap for coherent engagement with partners in order to maximise financial opportunities and ensure that resources are directed efficiently towards national climate and development priorities.

The Country Programme is building upon ongoing climate and development strategies in the Cook Islands including the National Sustainable Development Plan (NSDP) 2016-2020; JNAP II – Are We Resilient? The Cook Islands 2nd Joint National Action Plan (JNAP) – A sectoral approach to Climate Change and Disaster Risk Management 2016-2020; Cook Islands Renewable Energy Chart 2016-2020; Intended Nationally Determined Contribution (INDC) 2015; Second National Communication to the UNFCCC 2011; Cook Islands National Infrastructure Investment Plan 2015 – 2025; Individual Island Community Development Plans; Cook Islands State of the Environment Report 2017; Cook Islands National Biodiversity Strategy and Action Plan 2017-2021 and the draft Cook Islands Climate Change Policy 2018-28. It has been informed by the community, the public and private sectors, and non-government and civil society partners, through participatory approaches, under the guidance of the National Designated Authority, the Climate Change Cook Islands division of the Office of the Prime Minister.

The national government will provide the oversight for the implementation of this Country Programme, including the operationalising of a system of national coordination. All sectors and levels of government will be responsible to integrate, where appropriate, climate finance considerations in their plans and programmes.

THE COOK ISLANDS

The Cook Islands is a small island state comprising of fifteen islands spread over 1.8 million kilometres of the Pacific Ocean. It is located between the latitudes 8 degrees and 24 degrees south and longitudes 157 degrees and 166 degrees west. The fifteen islands are divided geographically into a Northern and Southern group of islands. Low coral atolls describes the Northern group of islands (Palmerston, Suvarrow, Nassau, Pukapuka, Rakahanga, Manihiki and Penrhyn. In the Southern group, only Rarotonga is a volcanic island. The remaining southern group (Aitutaki, Manuae, Takutea, Atiu, Mitiaro, Mauke, and Mangaia) are a mix of raised coral atoll or makatea, atoll and sand cay.

The Cook Islands economy is heavily dependent on natural resources for economic activities. Once dominantly agriculture based (up till the 1970s), the economy has shifted to a services driven economy, with tourism contributing about accounts for approximately 80% of the Gross Domestic Product (GDP).

The Cook Islands is highly vulnerable to climate change impacts, in particular coastal erosion and inundation, droughts, flooding, cyclones, increasing temperatures, changing ocean currents and abnormal weather patterns. To respond to these challenges, the country has conducted vulnerability assessments¹ and national consultations from 2016 to 2018 to determine climate change priorities for inclusion in this Country Programme.

1. Country Profile

Geographical location	Oceania
Land area	236.7 square kilometers
Population	17,459 (Census 2016 Preliminary Results)
Types of climate	Tropical oceanic, moderated by trade winds; a dry season from April to November and a more humid season from December to March
GHG emissions profile	GHG emissions rose by 56% between 1994 and 2006 – 3.6 t CO ₂ per capita ²
Key emitter sectors	Electricity generation, Transportation, Deforestation
Key climate risks	Sea level rise, Drought, Extreme rainfall, Cyclones, Higher temperatures
Vulnerable sectors	Water, Coastal protection, Built environments, Health, Energy, Agriculture, Marine Resources
NDA/FP	Climate Change Cook Islands (CCCI), Office of the Prime Minister (OPM)
National/Regional AEs	Ministry of Finance and Economic Management (MFEM), South Pacific Regional Environment Program (SPREP), Asian Development Bank (ADB)
International AEs	United Nations Development Program, UN Environment, European Investment Bank
Potential AEs nominated	Bank of the Cook Islands,

¹ 2nd National Communication under the UNFCCC submitted in 2011, with 3rd National Communication to be completed in June 2019.

² 2nd National Communication under the UNFCCC, 2011

1.1 Climate change profile: Highly vulnerable

1.1.1 Mitigation profile

The Cook Islands Second National Communications under the UNFCCC revealed that per capita GHG emissions rose by 56% between 1994 and 2006 (3.6 t CO² per capita). This largely resulted from the increased use of electricity with higher consumption of energy dependent appliances and the significant increase in tourism.

In 2006, the electricity generation comprised 34% of total GHG emissions, road transport 33%, with the remaining sources of emissions dominated by domestic aviation, solid and liquid waste management, agriculture and industrial coolants and solvents. In 2009, the Cook Islands spent 28% of its GDP on fossil fuel imports alone³. Anecdotal evidence suggests that fossil fuel imports as a percentage of GDP has declined over the years, as the GDP has increased, and there has been a reduction in price of fuel in recent years. Also assisting in the decline has been the increase in renewable energy utilisation for electricity.

The Cook Islands INDCs recognises that renewable energy and clean forms of transportation is a priority for reduction of GHG emissions. It also contributes to ensuring energy self-sufficiency and security.

The Renewable Energy Chart and Implementation Plan (CIREC) endorsed in 2012, is the blueprint for achieving the Cook Islands targets of 50% of islands powered by renewable energy by 2015 and 100% coverage by 2020. The Chart and Plan were updated in 2016 considering the increase solar PV generation on Rarotonga and the installation of solar-hybrid systems on the northern Cook Islands. Projects completed in the north include over 850kW of solar PV. With battery storage, these projects supply 95 – 100% of electricity from renewable sources. Installation of solar PV is currently being undertaken in four of the southern Cook Islands, with work scheduled for Aitutaki in 2019.

On Rarotonga, there is currently over 3 MW of renewable energy generation installed, contributing to on average 16%⁴ of Rarotonga's electricity needs. Te Aponga Uira o Tumutevarovaro (TAU), the power utility has halted grid tied installations till storage for excess energy is secured. The utility is currently implementing 4 MW battery storage project supported by the Global Environment Fund (GEF) and Green Climate Fund (GCF). TAU has also undertaken a range of other steps to progress the implementation of the CIREC Implementation Plan, including installing high efficiency, high-speed diesel generators which have the capability to respond to rapid changes in solar generation.

While forests in the Cook Islands add little to GHG emissions or sequestration, they do represent a 'carbon sink' and are an important buffer.

³ Second National Communication, 2011

⁴ Average percentage as of September 2018

1.1.2 Adaptation profile

Current Climate of the Cook Islands

There are significant differences in climate, including variability and trends, between the northern and southern Cook Islands. Mean and extreme temperatures are usually higher in the northern group. There is little seasonal variation for temperature in the two island groups. The South Pacific Convergence Zone (SPCZ) which is west and south of the northern islands and north of the southern Cook Islands affects the climate. When the SPCZ is more active, there is a wet season (November to April), and a dry season (May to October) when the SPCZ is generally north of the southern islands. The southern islands are more affected by the dry southeast trade winds. The SPCZ's inter-annual variability is strongly affected by El Niño and La Niña cycles and the El Niño Southern Oscillation, having effects on the Northern and Southern groups. El Niño events in the south tend to bring drier and cooler conditions than normal, while in the north, El Niño usually brings wetter and warmer conditions.

Long term climate projections are summarised in the table below⁵:

Table 1: Climate Projections

Climate trend	Climate Projection	Confidence Level (Very High, High, Medium, Low)
El Niño and La Niña events	Will continue into the future, with little consensus regarding frequency or intensity	Very High
Warming/Temperatures	Annual mean and extreme high daily temperatures will continue to rise	Very High
Rainfall	Average annual rainfall projected to remain similar to the current climate, with more extreme rain events, and a decrease in northern Cook Islands from May – October (under a high emission scenario)	More extreme rain events: High Decrease in northern Cook Islands: Medium
Waves	Not projected to change significantly with the exception of potentially more intense cyclones	Low
Wind	Overall increase in prevailing southeast trade winds, with increasing easterlies for the southern Cook Islands and increasing southerlies for the northern Cook Islands	Unavailable
Droughts	Southern Cook Islands: projected to remain similar to current climate. Northern Cook Islands: increase slightly (under a high emission scenario)	Medium
Ocean acidification	Will continue	Very High
Coral bleaching	Increase	Very High
Sea level	Will continue to rise	Very High

Less frequent but more intense Tropical Cyclones

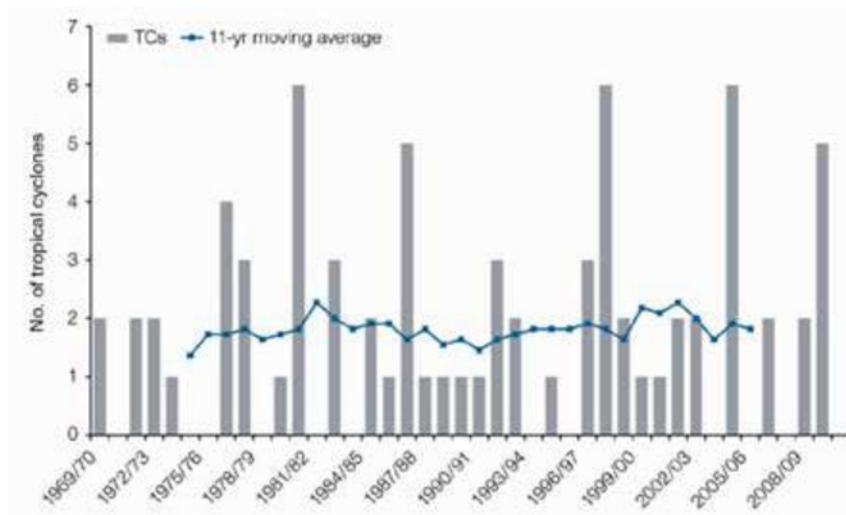
Tropical cyclones (TC) are the most extreme events that occur in the Cook Islands. The TCs usually occur between November and April, with increase in frequency and intensity during El Niño years. The cyclone seasons of 2004/2005 and 2009/2010 caused significant damages. In 2004/2005 six TCs crossed through the country, three of which were Category 5, devastating Pukapuka, Rarotonga and

⁵ Australian Bureau of Meteorology and CSIRO, 2014

Mangaia. Aitutaki suffered from Category 4 TC Pat in 2010. Other major cyclones in recent times include TC Sally (1986), TC Peni (1990), TC Martin (1997) and TC Pam (1997).

The graph below⁶ shows the number of TCs which cross the Exclusive Economic Zone (EEZ) between 1969 and 2009. There were three major cyclones in the early 1980s, late 1990s and mid 2000s.

Figure 1: Tropical Cyclone Trends



Economic impacts of TCs on the Cook Islands and resultant costs of adaptation is extremely costly for country with a narrow economic base. Estimated costs of TC damage only for Rarotonga in 2005 was NZD\$20 million⁷. It is estimated that the average cost per TC in the Cook Islands is NZD\$6.5 million⁸. TC Martin in 1997 destroyed 90% of housing and killed 19 people in Manihiki. TC Pat damaged 78% of homes in Aitutaki at an estimated cost of NZD\$9.5 million⁹.

The climate projections for the Cook Islands are based on three Intergovernmental Panel on Climate Change (IPCC) emissions scenarios: low (B1), medium (A1B) and high (A2), for the time periods around 2030, 2055 and 2090.

On the global scale tropical cyclones are projected to decrease by the end of the 21st century. However, an increase in average maximum wind speed between 2% and 11% and an increase in rainfall intensity of about 20% within 100 km of the cyclone centre. For the Cook Islands, projections tend to show a decrease in the frequency of tropical cyclones by the late 21st century and an increase in the proportion of more intense storms. The financial costs of an intense tropical cyclone to the Cook Islands can cripple the economy, and cause vast devastation on built and natural environments. The potential human costs can be phenomenal, both in terms of loss of life and health deterioration.

⁶ Australian Bureau of Meteorology and CSIRO, 2014

⁷ ADB, 2006

⁸ Cook, 2011

⁹ CIG, 2010

Higher Temperatures

Annual maximum and minimum temperatures have increased in both Rarotonga and Penrhyn since 1950. In Rarotonga, maximum temperatures have increased at a rate of 0.04 degrees Celsius per decade. These temperature increases are part of the global pattern of warming.

Projections for the Cook Islands by the IPCC for all emission scenarios indicate that the annual average air temperature and sea surface temperature will increase in the future. By 2030, under a high emissions scenario, this increase in temperature is estimated to be in the range of 0.5-0.9 degrees Celsius in the north and 0.4-1.0 degrees Celsius in the southern Cook Islands. By 2055, temperature increase under a high emission scenario will range from 1.0-1.8 degrees Celsius in the north Cook Islands, while in the South between 0.9-1.7 degrees Celsius. By 2090, a high emission scenario is projected to increase temperature by 2.0-3.2 degrees Celsius for the north and 1.8-3.2 degrees Celsius for the south Cook Islands.

Increases in average temperatures will also result in a rise in the number of hot days and warm nights, and a decline in cooler weather.

Epidemiological research has connected vector borne disease transmission to temperature, where warmer temperature can shorten incubation periods for mosquitos from 12 days at 30 degrees Celsius to only 7 days at 32-35 degrees Celsius. Shorter incubation can significantly increase the transmission rate of dengue, chikungunya, zika and other vector borne disease. Temperature also influences the biting rates, diapause and maturity of the protozoan parasite found in sandflies. Although, sandflies are currently only found in Aitutaki and Mitiaro, there is potential risk that an infected female causing leishmaniasis. Other health implications of increased temperatures are respiratory diseases, physical discomfort, mental and emotional stress and the potential for heat related deaths among the vulnerable aged and children groups.

Changing rainfall patterns

There is uncertainty around rainfall projections for the Cook Islands as model results are not consistent¹⁰. However, average annual and seasonal rainfall is generally projected to increase over the course of the 21st century for the Southern Islands. The projected intensification of the South Pacific Convergence Zone may mean that it will be drier in the North.

Model projections show extreme rainfall days are likely to occur more often throughout the Cook Islands.

These projections have significant implications for water and sanitation services, and flood control. Concerns for water supply include damage to infrastructure from flooding, loss of water sources due to declining rainfall and increasing demand, changes in the water quality of sources and changes within distribution. Actions to address these issues in light of changing rainfall patterns require attention for all islands, particularly the drought prone north.

Flood mitigation will be essential for the southern group, particularly with Rarotonga already suffering impacts of damage to infrastructure and ecosystem services from recent extreme rainfall days. Sanitation will also require attention. Droughts may impact on sanitation practices as water resources are stressed, while flood concerns include loss and damage to sanitation services and reduced absorptive capacity of land and lagoons to cope.

¹⁰ Pacific Climate Change Science Program partners, 2011

Sea level will continue to rise together with storm surges

Sea level is expected to continue to rise in the Cook Islands. By 2030, under a high emissions scenario, this rise in sea level is estimated to be in the range of 4-15 cm. The sea-level rise combined with the natural year to year change will increase the impact of storm surges and coastal flooding. It is possible that predictions will change for the worse when more knowledge is established on the contribution to sea level rise of large ice sheets such as Antarctica and Greenland.¹¹

It is also anticipated that storm surges will increase. Already communities on all islands have confirmed that storm surge and king tide events are becoming far more frequent in comparison to the past decades. Observed impacts are flooding of low lying areas, inundation, foreshore erosion and sedimentation of lagoons.

As the sea level rises and storm surges intensify, building the resilience of coastlines, seaside infrastructure and shoreline ecosystems is essential. The adaptive capability of the population will also require strengthening.

Ocean acidification will continue

Under all three emissions scenarios (low, medium and high) the acidity level of Cook Islands seas will continue to increase over the 21st century, with the greatest change anticipated under the high emissions scenario. Increased acidification will have significant impact on the health of reef ecosystems which will also be compounded by other stressors including coral bleaching, storm damage and sanitation.

1.1.3 Priority Sectors for Mitigation and Adaptation

The key sectors for mitigation are electricity, transport, deforestation and land use change. The fundamental challenge to mitigation interventions are access to finance, availability of appropriate low emission technologies to suit the Cook Islands context and expertise in renewable energy and energy efficient technologies.

The key sectors for adaptation are education; infrastructure (roads, bridges, buildings, built coastal structures, harbours, airports); water; waste – solid and liquid; wetlands, waterways and coastal and terrestrial ecosystems; agriculture; marine resources; and cross cutting areas such as health, culture and gender.

1.2 Development Profile

1.2.1 The Cook Islands economy

The Cook Islands geography has both advantages and disadvantages for the economy. Its natural beauty and unique culture is the platform of the tourism based economy. Strong growth in tourism in recent years has seen the Cook Islands experience economic growth and progression towards higher levels of economic prosperity. However, the strong economic growth and heavy reliance on this sector makes the Cook Islands extremely vulnerable to shocks in external markets and natural disasters. If a

¹¹ Pacific Climate Change Science Program partners, 2011

major tropical cyclone were to hit Rarotonga, it would take time before the tourism industry and the entire country could rebuild.

Rarotonga is the centre of commercial activities, including tourism and is home to around 72 percent of the resident population. Due to the small populations on the rest of the inhabited islands (pa enua), economies are largely subsistence, with some small tourism, agriculture and pearl industries. The Cook Islands Government, thus provides high levels of support to the pa enua to ensure that a reasonable standard of living is achieved for all residents. Despite this, inequality between Rarotonga and the pa enua remains an issue.

The Asian Development Bank (ADB) Outlook 2017, provides a positive picture on the Cook Islands, although noting that it must maintain prudent macroeconomic management against rising risks from economic and climate shocks. Strong growth in tourism, coupled with higher levels of public and private capital investment has equated to strong economic growth averaging 3.7 percent over the period 2011/12 to 2016/17. Nominal and real GDP growth is expected to remain positive in the coming years, though at lower levels, due to continued but slower growth in tourism and investment, both public and private.

1.2.2 The National Guiding Instruments for climate change mitigation and adaption investment

The National Vision and the National Sustainable Development Plan (NSDP)

The National Sustainable Development Plan (NSDP) outlines sixteen specific goals representing the different dimensions of Cook Islands society and development. Goal 6 of the NSDP is to “*Improve access to affordable, reliable, sustainable, modern energy and transport*”, with Goal 13 to “*Strengthen resilience to combat the impacts of climate change and natural disasters*”. Whilst these two goals relate directly to climate change mitigation and adaptation, they interlink with all of the other 14 goals of the NSDP. Each goal is related to the others in some way or form. The NSDP serves as a national scorecard for development, articulating key performance indicators under each goal.

This Country Programme is an important part of accelerating the Cook Islands development towards the realisation of the national vision: “*To enjoy the highest quality of life consistent with the aspirations of our people, in harmony with our culture and environment.*” Achievement of this vision will not be possible if climate change is left unattended. Globally, climate change is expected to have severe consequences over the short to medium term across such sectors as water, energy, agriculture, marine resources, trade and tourism.

As a Small Islands Developing State (SID), the fact that the Cook Islands is extremely vulnerable to the impacts of climate change is undeniable. The country’s high dependence on climate sensitive natural resources for livelihoods increases its vulnerability to climate change. Furthermore, the threat of increased intensity of cyclones and sea surges is ever present, noting that one category five tropical cyclone will not only slow down the Cook Islands development prospects, but set the country back decades. Climate change is a major risk to the sustainable development goals of the country.

The Cook Islands Climate Change Policy

This Country Programme will also implement the Cook Islands Climate Change Policy and the policy statement: “*To further national goals through enhanced mobilisation of climate finance that contributes to low-carbon climate resilient development.*” The policy seeks to mobilise domestic and international climate finance resources to address the Cook Islands climate change and national

development agenda, including the country's Intended Nationally Determine Contributions (INDC) under the United Nations Framework Convention on Climate Change (UNFCCC). It underscores the potential role that climate finance plays to support priority activities in key economic and environment sectors, as well as, the co-benefits of building social capital.

The Joint National Action Plan – JNAP II: Are we resilient? Are sectoral approach to Climate Change and Disaster Risk Management

The JNAP II (2016-2020) follows on from the original JNAP (2010-2015). With the vision of JNAP II for "A safe, Resilient and Sustainable Cook Islands", its goal is to "Strengthen climate and disaster resilience to protect lives, livelihoods, economic, infrastructural, cultural and environmental assets in the Cook Islands in a collaborative, sectoral approach". Resulting from extensive consultation and planning, the JNAP II contains nine strategic areas of action covering good governance; water and food security; environmental sustainability; research, monitoring and information management; Cook Islands culture and identity; energy and transport; infrastructure; climate and disaster risk; health and welfare. The Country Programme is aligned to the implementation of the JNAP.

The Cook Islands National Infrastructure Investment Plan 2015

This document (CI NIIP) outlines the Cook Islands priorities and plans for major infrastructure over a ten year period. Assembled through a consultative process it covers air transport; marine transport; road transport; water supply; solid waste management; energy; telecommunications and information technology; education; health; and other infrastructure. An integral part of the CI NIIP is an assessment on the impacts of climate change and natural hazards on priority projects. Whilst the Plan is scheduled for a mid-term review, it presents a useful basis for infrastructure development for mitigation and to build resilience to the impacts of climate change, which have been included into this Country Programme.

Cook Islands National State of the Environment Report 2016

The 2016 State of the Environment (SOE) Report updates the 1993 SOE. Comprising of 3 parts, the first looks at the Drivers and Pressures on the environment in the Cook Islands. Secondly, it reviews the state of the environment and impacts on society under seven key themes. The first of these themes is Atmosphere and Climate. Lastly the SOE presents key responses, opportunities, challenges and recommendations. These have been considered and incorporated into this Country Programme.

Cook Islands Renewable Energy Chart (CIREC) – Atamoa o te Uira Natura

The renewable energy goal is focused on measuring progress on the accessibility, use and composition of energy and transport. The Cook Islands has been proactive in the promotion of its electricity targets to be 50% renewable energy by 2015 and 100% by 2020. Developed in 2012 and updated in 2016, the Atamoa o te Uira Natura celebrates the achievements of electricity conversion from fossil fuels to renewable sources up to 2015. Projects completed in the northern islands include over 850 kW of solar PV. With battery storage these projects supply 95% - 100% of electricity from renewable sources. On Rarotonga, in 2015, over 3 MW of renewable energy had been installed, contributing to 13% of Rarotonga's electricity needs. These comprised of solar PV, including the 1 MW 'Te Mana o te ra' array. Te Aponga Uira has also undertaken a range of other steps to progress by installing high-efficiency, high speed diesel generators, which have the capability to respond to the dynamic nature of solar generation. The update of the Atamoa o te Uira Natura in 2016, outlines work that needs to be done to ensure that all Cook Islanders have affordable, reliable and sustainable energy to power our future. This has been integrated into this Country Programme.

Key sectoral policies relating to climate change

Table 2: Key sectoral policies relating to climate change

Agriculture	Agriculture Sector Plan
Culture	National Cultural Strategy 2017-2030
Education	Education Master Plan 2008-2023
Energy	Cook Islands Renewable Energy Chart 2012, revised 2016
Environment and Natural Resources	<ul style="list-style-type: none"> • National Environment Strategic Action Framework • 2nd National Biodiversity Strategy and Action Plan (NBSAP) 2017-2021
Health	<ul style="list-style-type: none"> • Climate Change and Health Adaptation Plan 2012 • National Health Strategic Plan 2017-2021
Infrastructure	<ul style="list-style-type: none"> • Cook Islands Infrastructure Investment Plan 2015 • National Roads and Road Drainage Policy 2017
Marine Resources	Marae Moana Policy 2016
Water	National Water Policy 2017
Waste	<ul style="list-style-type: none"> • Cook Islands Sanitation (wastewater management) Policy 2016 • Cook Islands Solid Waste Management Policy 2016-2026

1.2.3 The Gaps in National Guiding Instruments

Vulnerability and Risk Assessment

As part of the preparation for the 2011 Second National Communication (2NC), vulnerability and risk assessments were conducted on all islands in 2009. This Country Programme applies the findings of the 2009 vulnerability and risk assessments as a baseline. This is further complemented by anecdotal information gathered during community consultations during the Country Programme development process. The individual island/community development plans have also supplemented findings and have been combined herewith. The Cook Islands has sought future support from the GCF Readiness Funds to conduct vulnerability and risk assessments in the pa enua.

Financial, Technology and Capacity Building Needs

The Cook Islands requires international support from multilateral and bilateral sources for capacity building, climate finance and technology transfer to reinforce its efforts to date. This should strengthen current programs, policies; regulations; develop and implement new initiatives; and fully assess and address the impacts of climate change. Activities could include, a comprehensive assessment of the cost of mitigation and the incremental cost of adaptation; enhancing measurement, reporting and verification (MRV) practises; development of standardised baselines to assess and monitor the impacts of implementing NDC initiatives; support for data collection, storage and management; and support for education, training, public awareness, public participation, public access to information and international cooperation in the implementation of this Country Programme and the Cook Islands NDC targets.

Whilst climate change presents overwhelming challenges for the Cook Islands in building resilience and achieving its community and national development goals, it also affords opportunities to improve development planning; leverage multilateral and bilateral financial partnerships; and have greater collaboration between national and local governments, the private sector, CSOs and communities in the progress towards low-carbon climate resilient development and the realisation of the NSDP.

1.2.4 Spending on climate change

For the period of 2016/17 – 2019/2020 financial years, the estimated climate change spending as a percentage of total appropriation by the Cook Islands Government within its budget is 16% (this includes all sources of funding). 6% is attributed to development partner (ODA) assistance, with Cook Islands Government covering 7% and the balance of 3% being borrowings (loans). In terms of GDP, total climate change finance equates to 9% of GDP. Development partner (ODA) contributions equal 3% of GDP, local budget allocation for climate financing is 4% of GDP, while borrowings make up 2% of GDP.¹²

The Cook Islands has and is utilising GCF Readiness Funds. It has attracted total USD840,000 (Readiness 1 – USD150,000; Readiness 2 – USD690,000) under the Readiness Program to build the capacities of the National Designated Authority, to develop this Country Programme, support the Direct Access Accreditation of the Ministry of Finance and Economic Management (MFEM) to the GCF and implement education and awareness programs. The Cook Islands intends to submit a third Readiness proposal to the GCF to support the accreditation of the Bank of the Cook Islands, preparation of Concept Notes and project development under the Country Programme, review and enhance the Cook Islands NDC and conduct a Technology Needs Assessment and comprehensive Risk Assessment.

1.2.5 Pacific regional engagement

The Cook Islands is an active member of all organisations that make up the Council of Regional Organisations in the Pacific (CROP). These are the Pacific Community, Pacific Islands Forum, South Pacific Regional Environment Program, South Pacific Tourism Organisation and the University of the South Pacific. It stands in solidarity with the rest of the region in its position on climate change and the urgent need for global, regional, national and local action towards low carbon resilient development. As such, the Cook Islands is fully supportive of the Framework for Resilient Development in the Pacific (FRDP) 2017-2030.

1.3 Snapshot of national initiatives under the UNFCCC

1.3.1 National Communications to the UNFCCC

The Cook Islands ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1993 and submitted its initial National Communication (INC) in 1999. In 2011 the Second National Communications (2NC) was submitted outlining the activities that the Cook Islands has carried out to meet its requirements under the UNFCCC, since the INC. The 2NC highlighted that the Government of the Cook Islands increased its focus on addressing climate change since the INC. This included improved engagement amongst the multi stakeholder climate change country team, more active representation in international negotiations, national awareness and capacity building, and the establishment of the coordination offices for renewable energy and climate change within the Office of the Prime Minister.

The United Nations Environment (UNE) is providing support for the development of the Third National Communications (3NC). It is anticipated that this will be submitted in 2019. The 3NC will be able to

¹² Ministry of Finance and Economic Management, 2018

illustrate the considerable progress made by the Cook Islands towards addressing climate change since 2011, particularly with the assistance of multilateral and bilateral development partners.

1.3.2 Intended Nationally Determined Contributions (INDCs)

The Cook Islands submitted its Intended Nationally Determined Contributions (INDCs) in November 2015. The following table summarises INDC initiatives.

Table 3: Summary of INDC initiatives

Summary of INDC/NDC initiatives		Estimated Resources Required USD \$
Conditional	Mitigation 1. Storage for renewable energy 2. Integration of energy efficiency and new technologies 3. Technology transfer 4. Strengthen capabilities for overall sustainability and co-benefits 5. Reduce emissions from electricity generation by a further 43%, totalling an 81% emissions reduction by 2030 (relative to 2006) 6. Low carbon transport technologies 7. Incentives for transition towards clean energy transportation	USD 350 – 550 million
	Adaptation 1. Coastal protection 2. water security 3. Agriculture 4. Forestry 5. Marine Conservation 6. Waste Management 7. Tourism 8. Land management 9. Loss and Damage	USD 450 – 700 million
Unconditional	1. Designating EEZ 1.8 million square kilometres as a marine park (Marae Moana) for building resilience of marine ecosystems 2. Establishing the frameworks and robust systems to support climate change mitigation and adaption measures	USD 200 million

1.3.3 Nationally Appropriate Mitigation Actions (NAMAs)

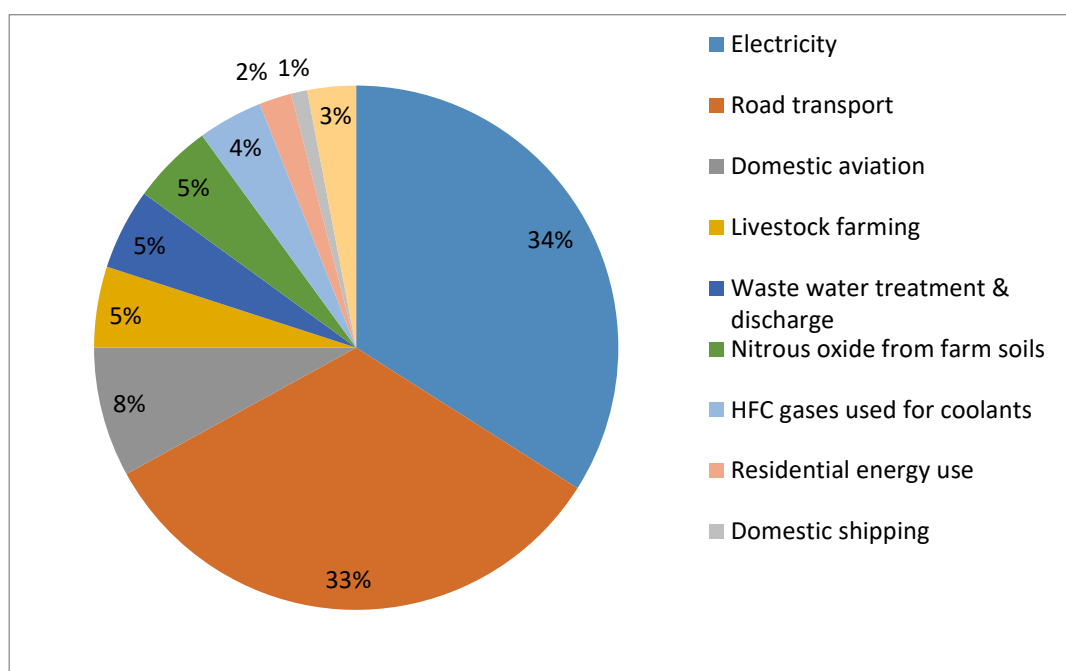
The Cook Islands First Nationally Appropriate Mitigation Actions (NAMAs) submitted in 2013 highlight support required to implement the goal of 100% of electricity to be supplied using renewable energy by 2020. Key areas of focus highlight support for capacity building through training, technology assistance and financial investment from Government, development partners and the private sector.

1.4 Key data on climate change

1.4.1 Key emissions

Based on a 2006 Green House Gas (GHG) inventory, the Cook Islands emission was estimated at 69,574t CO₂ –e, which contributes 0.00012% of the 2004 global GHG emissions¹³. The energy sector alone contributed 79% of the total emissions for 2006, with 34% attributed to electricity generation. Calculations of the various sectors are as follows:

Figure 2: Emissions by sector



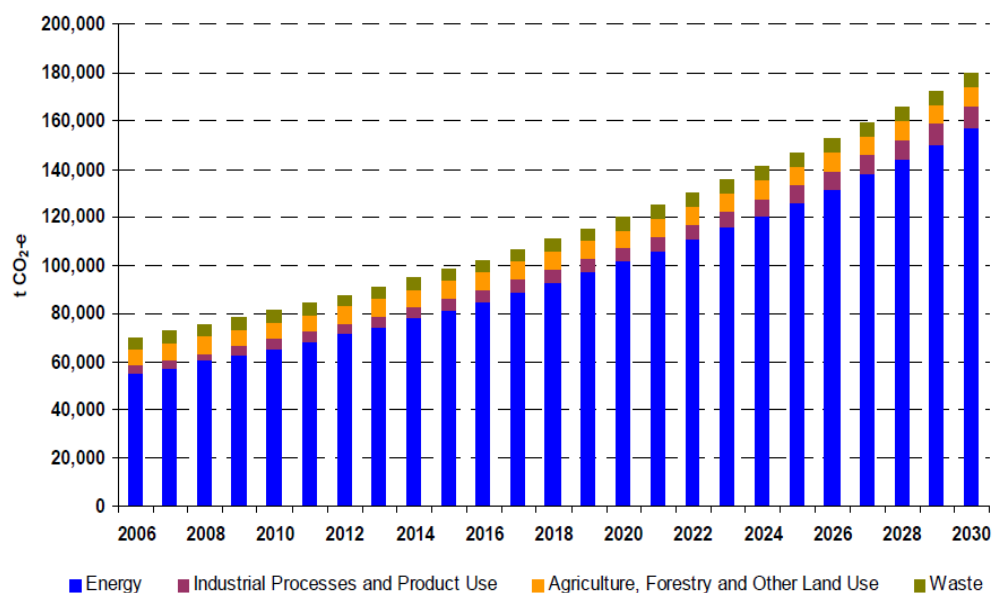
In terms of gases, CO₂ made up 79% of the emissions, CH₄ 10%, N₂O 7% and HFCs 4%. The energy emissions were split between electricity (43%) and transport (42%) and local aviation (10%), with the other uses taking the balance (5%). The 2NC recognises that there are some gaps in the inventory calculations due to lack of national energy data, and the GHG calculations were done entirely using the sectoral approach.¹⁴ Business As Usual projections for the future see the emissions rising from 69Gg in 2006 to 180 Gg by 2030.

¹³ IPCC, 2007

¹⁴ Cook Islands Second National Communications, 2011

Figure 3: Business as usual projection of emissions, by sector

Figure 0.2: Business as usual projection of emissions, by sector (t CO₂-e, 2006-2030)



The 2NC suggested mitigation options to further renewable energy in the electricity sector with energy efficiency, waste management as minor options.

The Cook Islands is currently in undertaking another GHG stocktake and anticipate that this will be completed in 2019. It will be interesting to see the impact of the contribution of electricity to the GHG inventory in light of the transformation of the northern Cook Islands to renewable energy, where current supply is 95 – 100% from renewable sources; the scheduled completion of photovoltaic systems for four islands in the south in 2018; and the current 16% of energy supplied from renewable sources for the main island, Rarotonga, considering the battery storage with support from the Global Environment Fund (GEF) and the Green Climate Fund, which will be implemented in 2018-2019. It is expected that these energy storage solutions will increase the renewable energy uptake in Rarotonga. The implementation of renewable energy in Aitutaki in 2018-2020, is also expected to influence the GHG inventory contribution of electricity in the country.

1.4.2 Vulnerability and Adaptation

The 2NC summarises climate change vulnerabilities to physical impacts of climate change in four key parameters that are altered by climate change. This is as follows¹⁵:

Table 4: Climate change vulnerabilities to impacts of climate change

	Temperature Rise	Rainfall Variation	Extreme Weather events	Sea Level Rise
Coastal Zones, Infrastructure and Coral Reefs	Coral bleaching	Runoff, sedimentation, salinity	Wave damage, erosion	Erosion, increased storm surge
Marine Resources / Fisheries	Pearl diseases, food chain, migratory and distribution changes	Habitat, salinity	Damage to coastal infrastructure and vessels, stock loss	Damage to coastal infrastructure,

¹⁵ Cook Islands Second National Communication, 2011

				unsuitable growing conditions
Water Supply and Quality	Quantity, demand, quality, vectors	Shortages, blockages, contamination	Water pollution, infrastructure damage	Increase salinity of freshwater table
Agriculture, Food, Security and Diet	Prevalence of invasive species, productivity	Drought, flooding, crop disease	Damage to infrastructure and crops	Increase salinity of low lying growing areas
Biodiversity (Terrestrial & Marine)	Increased prevalence of invasive species, species distribution or migration	Increased prevalence of invasive species	Casualties, habitat and food loss	Degradation of habitat, breeding sites
Human Health and Wellbeing	Emergence of tropical diseases, heat stress, productivity impacts	Favourable mosquito breeding conditions	Injury during and increased risk following, stress and social interruption	Impact on coastal infrastructure, housing, etc.
Cross-cutting socio economic considerations	Key economic sector losses increasing poverty. Increasing energy demand (cooling). Particularly of concern for already vulnerable groups the disabled, youth and women.	Reduced tourism attractiveness, and economic losses from productive sectors, food security, natural resources for handicrafts etc., lack of insurance cover	Damages to critical infrastructure, relocation of people, pollution, disruption of education and social services, affecting already vulnerable groups like disabled, youth and women	Loss of land, traditional livelihood and culture, social and gender implications, investment diverted

Community consultations for the development of this Country Programme have reiterated that these vulnerabilities are still valid, with the added vulnerability of flooding due to rainfall variability, particularly in Rarotonga; increased action needed on foreshore erosion; enhanced achievements needed in building resilience to extreme events, sea level rise and temperature rise; and the need for support to enable the private sector, non-government organisations and communities to address specific adaptive capability needs.

1.4.3 Key sectors where activities are underway

The Cook Islands has progressed since its 2NC on concrete activities to address its mitigation targets and build resilience to climate change. These actions are aligned to the INDCs and the implementation of the NSDP, JNAP and CIREC. The following key initiatives have been implemented in the last five years:

Mitigation

1. Transformation of the energy systems in all northern islands from diesel to solar photovoltaic.
2. Implementation of solar energy in four southern islands – Mitiaro, Atiu, Mauke, Mangaia.
3. Changing the generator systems in Rarotonga to more efficient and renewable energy compatible engines.
4. Increasing renewable energy uptake in Rarotonga from almost nil to 16% within 5 years.
5. Commencing the implementation of battery storage on Rarotonga to allow greater renewable energy use.

Adaption

1. Significant investment in the water infrastructure on Rarotonga.

2. Increasing capacity for rainwater capture, storage and ground water management in the pa enua.
3. Investment in upgrading sanitation systems in Muri and Titikaveka, Rarotonga.
4. Implementing climate resilient agricultural and fishing practices in the pa enua.
5. Enhancing resilience of tourism enterprises in 3 pa enua islands.
6. Implementing lagoon clean up in Manihiki.
7. Implementing vector borne disease control on all islands.
8. Delivering small grants to the 11 pa enua and their communities to implement adaption and resilience building activities.
9. Legislating the Cook Islands EEZ as the Marae Moana – Marine Park.
10. Conducting coral reef surveys to establish baselines for coral health in the southern islands.

1.5 Summary of national priorities in the context of GCF result areas

The Cook Islands main strategic documents relating to sustainable development and climate change were analysed with the purpose of seeking alignment with the GCF result areas for mitigation (Energy generation and access; Transport; Buildings, cities, industries and appliances; land use and forest) and adaptation (Livelihoods of vulnerable people, communities and regions; Health, food and water security; Infrastructure and built environment; Ecosystems and ecosystem services). The documents analysed include:

- National Sustainable Development Plan 2016-2020
- JNAP II – Are we resilient? The Cook Islands 2nd Joint National Action Plan: A sectoral approach to Climate Change and Disaster Risk Management 2016-2020
- Cook Islands Renewable Energy Chart – Atamoa o te Uira Natura 2016-2020
- Intended Nationally Determined Contributions (INDC) 2015
- Nationally Appropriate Mitigation Action (NAMA) NS-48- Supporting Implementation of 100% Renewable Electricity by 2020
- Second National Communication to the UNFCCC
- Cook Islands National Infrastructure Investment Plan 2015-2025
- Individual Island Community Development Plans
- Cook Islands State of the Environment Report 2017
- Cook Islands National Biodiversity Strategy and Action Plan
- Marae Moana Policy 2016

In addition, two national consultations were conducted in 2016 (Brilliant Resilient Workshop) and 2017 (Fostering Resilience Workshop) to engage with a wide array of stakeholders to define national priorities for climate change and for development of a pipeline for submission to the GCF. Furthermore, community, island and village consultations were held throughout 2018 on priorities for inclusion in this Country Programme. These consultations were supported by GCF Readiness Programme.

The combination of the analysis of documentation and public and sectoral consultations signalled that the main priorities for climate finance funding in the Cook Islands are as follows:

Mitigation	<ul style="list-style-type: none"> ○ Renewable Energy ○ Energy Efficiency ○ Efficient Transport ○ Integrated Waste Management ○ Forest Management
Adaptation	<ul style="list-style-type: none"> ○ Integrated Water Resource Management ○ Sanitation ○ Waste management ○ Disaster Risk Management, including meteorological capacities ○ Sustainable Agriculture ○ Climate Proof Infrastructure ○ Health ○ Coastal Protection ○ Land Use Management ○ Integrated Flood Management
Cross Cutting	<ul style="list-style-type: none"> ○ Resilient Ecosystems and Ecosystem Services ○ Housing/Green Islands ○ Ocean Management

2. Country Agenda and GCF Engagement

2.1 Institutional arrangements

Building on the stakeholder engagement process, constant engagement must be maintained throughout the delivery of the Country Programme to ensure that stakeholders are informed and participate in implementation.

The NDA and the TAG

The Climate Change Cook Islands (CCCI) division of the Office of the Prime Minister (OPM) is the Cook Islands National Designated Authority (NDA) and will be the lead Coordinator of the Country Programme implementation. The NDA Technical Advisory Group (TAG) comprising of Central Policy Planning Office (CPPO) division of the OPM, the Treasury division of MFEM, the Development Coordination (DCD) division of MFEM and the National Environment Service (NES), will provide support to the NDA. Depending on the nature of its business at any given time, the TAG may invite other relevant stakeholders to be part of the process of assessing project proposals to ensure alignment with the Country Programme, NSDP, JNAP and Climate Change Policy. The TAG will also ensure that stakeholders have been involved in the planning and implementation of the proposed project/programme, and that key criteria of Impact; Sustainability; Environment and social safeguards; Gender/youth considerations; Transformational potential; and Innovation, are met.

NSDC

Decision making upon the advice of the TAG, will be responsibility of the National Sustainable Development Commission (NSDC). The NSDC comprises of the Heads of Ministries for the OPM, MFEM, NES, Education, Foreign Affairs and Immigration, a representative from the social sector, and a representative from the economic sector.

Climate Change and Disaster Risk Management Platform

The Climate Change and Disaster Risk Management Platform meets on a quarterly basis. The group comprises of approximately fifty representatives of government agencies, non-government and civil society organisations, private sector and traditional leaders. Quarterly meetings are held to provide an update on climate change and disaster risk management activities in country and those abroad, which may have bearing on the Cook Islands. The progress of the Country Programme will be reported to the Platform on a quarterly basis for open dialogue.

Yearly GCF Stakeholder Workshop

In order to keep the main stakeholders at the same level of information on the GCF, the NDA will organise a yearly stakeholder information workshop. This workshop will be an opportunity to:

- Present an update on climate change issues including the GCF, status of the project funding globally and any developments of interest to the Cook Islands;
- To present the status of climate change projects in the Cook Islands: projects funded, project proposed for funding, including those proposed to and supported by GCF funding;
- To discuss any other issues related to climate change including development partner, Adaptation Fund and GCF processes in country.

CCCI Website, Facebook, Instagram and Twitter

The internet is an important and effective tool for information dissemination. Regular updates will be posted online, in order to keep climate change alive in people’s mind and inform on any important issues; opportunities or events; and climate finance information, including Adaptation Fund and GCF news and transparency requirements.

2.1.1 National Climate Change Engagements with other International Partners

The Climate Change Cook Islands (CCCI) division of the Office of Prime Minister (OPM) is the national focal point for climate change, and has a responsibility for coordinating climate finance initiatives, in close collaboration with the Ministry of Finance and Economic Management (MFEM).

The table below summarises current climate change programs in the Cook Islands. It also briefly outlines engagement with the GCF as a key partner in climate change financing:

Entity/Partner Name	Area/s of focus	Engagement in country	Efforts to strengthen engagement with GCF
GCF	Readiness Programme	Funding support for the Ministry of Finance to gain direct access accreditation to the GCF; develop the Country Programme; develop the Climate Change Policy; education and awareness on the GCF	Meeting reporting requirements to demonstrate optimization of Readiness Programme funding

ADB	Renewable Energy	Transforming the electricity systems on Atiu, Mitiaro, Mauke, Mangaia and Aitutaki	Seeking to engage further with the GCF to continue efforts in achieving national renewable energy targets
ADB/GEF funding	Renewable Energy	Implementation of battery storage for Rarotonga with Te Aponga Uira	Seeking to engage further with the GCF to continue efforts in achieving national renewable energy targets
ADB/GCF funding	Renewable Energy	Implementation of battery storage for Rarotonga with Te Aponga Uira	Seeking to engage further with the GCF to continue efforts in achieving national renewable energy targets
ADB	Disaster Risk Management	Contingent Loan for disaster response	Seeking to identify synergies when engaging with the GCF
UNE	National Communication	Preparation of the Third National Communication to the UNFCCC	Incorporate the TNC into engagements with the GCF
MFEM (NIE)/Adaptation Fund	Water, Agriculture and Disaster Risk Management	Implementing the 'Pa Enea Resilient Livelihoods' (PEARL) program	Build on and build synergies with PEARL in terms of engaging with the GCF
UNDP/GEF funding	Multi sectoral	Implementing the 'Ridge to Reef' (R2R) program	Build on and build synergies with R2R in terms of engaging with the GCF
SPC/GIZ	Water	Implementing the community water tanks repair program in the northern islands	Build on and build synergies with GCF to address resilience development in the water sector
New Zealand and China	Water	Implementing the tripartite 'Te Mato Vai' programme in Rarotonga	Build on and build synergies with GCF to address resilience development in the water sector

New Zealand	Sanitation	Implementing sanitation solutions for Rarotonga through the 'Mei te Vai ki te Vai' programme	Build on and build synergies with GCF to address resilience development in sanitation and waste management
Pacific Islands Forum Secretariat/Japan Pacific Environment Community funding	Renewable Energy	Providing the solar panels for the implementation of renewable in the southern islands including Rarotonga	Seeking to engage further with the GCF to continue efforts in achieving national renewable energy targets
Japan	Disaster Risk Management	Building a cyclone/extreme weather shelter on the island of Palmerston	Seeking to engage further with the GCF to continue efforts addressing the impacts of cyclones and other extreme weather events

2.2 Roles and contributions of key stakeholders

Key Stakeholder Groups and Consultations

Consultations for the development of the Country Programme commenced in May 2016 with a national workshop, entitled Brilliant Resilience, bringing together key stakeholders from Government agencies; non-government organisations and civil society organisations; the private sector; traditional leaders; representatives from community groups and the pa enua (including the Island Government Mayors and Executive Officers). The workshop involved discussions on climate change at both a global, regional, national and local levels. This workshop also presented the role that the GCF can play in addressing the impacts of climate change. At the conclusion of the workshop, key climate issues and priority areas for action were identified by the participants.

Subsequent Climate Change and Disaster Risk Management quarterly platform meetings continued the discussion on climate change issues and priority areas for action.

Consultations were conducted with south pa enua in July 2017 to discuss the impacts of climate change on their islands and potential action needed to address these. The role of the GCF supporting action was also highlighted during these consultations.

In October 2017, a follow-up national workshop (Fostering Resilience) was convened amongst all key stakeholders from Rarotonga and the pa enua. This workshop explained the developments since 2016, particularly in relation to accessing finance from the GCF and the Adaptation Fund. The priority areas for action identified in 2016 were revisited and substantiated for inclusion into the Country Programme.

From June to October 2018, sectoral and community meetings were conducted to look at priority areas for climate change action. Meetings were also held in the margins of the Constitution Celebrations in July to August 2018, with the communities from the northern islands. These meetings reinforced the results of earlier consultations on the priority areas for climate change action, which are incorporated into this Country Programme.

Furthermore, discussions on the Country Programme have been held with individual government agencies and interest groups since October 2017.

Additional consultations will have to be had with key stakeholders on specific projects/ programmes that will be implemented throughout the implementation of the Country Programme.

Expected roles of stakeholders in the implementation of the Country Programme

All consultations have indicated that continuous stakeholder inclusion and participation throughout the project cycle is central to bringing about behavioural change in tandem with project/programme interventions, to ensure transformational outcomes. Stakeholders expect to participate in project planning, implementation, providing technical and policy advice, monitoring and evaluation. They also expect to be regularly informed on progress through various avenues. It is anticipated that communities, non-government and civil society organisations and the private sector will participate in a project/programme either as implementing bodies, support implementation, procurement and supply.

Particular technical assistance, policy dialogue support, or other support to enable national stakeholders' participation

The Cook Islands NDA will seek funding to build stakeholder capacities and facilitate the successful implementation of the Country Programme. The NDA will look towards mechanisms such as the GCF Readiness program and other partners for assistance in this regard.

2.3 Country priorities for climate change financing

Priority programmatic areas

The priority sectors identified through existing national and sectoral documents, specific island plans and community consultations have been synthesised into eleven programmatic areas which are characteristically inter-thematic and needs multi-stakeholder input in order to achieve the Climate Change Policy goal where climate change action will progress the transition of the Cook Islands on a low carbon development pathway and build the resilience of the country and people to the impacts of climate change through coordinated, inclusive, culturally appropriate adaptation and mitigation measures.

1. Renewable Energy Development (including clean energy transportation)
2. Coastal Protection and Restoration
3. Water Security
4. Disaster Risk Management
5. Waste Management
6. Climate Proofing Infrastructure
7. Integrated Flood Management
8. Agriculture and Ecosystem Based Adaptation
9. Ocean Management

10. Livelihoods of People and Communities

11. Knowledge, Research and Innovation

The priority programmatic areas are underpinned by the following pillars:

- Promoting gender responsive, participatory and transparent low carbon and climate resilient development pathways.
- Developing resilience through climate proofing key productive sectors, while improving human wellbeing and ecological integrity through sustainable livelihoods, food, water, energy security and opportunity creation using a cohesive approach.
- Encouraging participation of the private sector, civil society and communities to complement government and climate finance partnerships in mobilizing resources and implementing climate change initiatives.
- Consolidating all sources of financing, including climate finance, the national budget, development partner assistance and the private sector to implement low carbon and climate resilient pathways.
- Integrating climate information in decision making at all levels.

Pinpointing the priority programmatic areas

The Cook Islands approach to achieving its Climate Change Policy goal is to understand the core vulnerabilities of the islands to climate change and sources of emissions and to develop a programmatic portfolio that will have the greatest impact on the ground. In doing so, the country programme is aligned with the eight investment priorities of the GCF. There are interlinkages and crossovers between programmatic areas reflecting the multifaceted nature of addressing the impacts of climate change in the context of people-centred development. It is therefore envisaged that projects/programmes will have significant co-benefits. The programmatic areas integrates climate change adaptation and mitigation with development processes to ensure impact, paradigm shift and sustainable development potential, responsiveness to the country and community's needs, and actual and potential efficiency and effectiveness in delivery. The interventions identified in each priority programmatic area hopes to build on current efforts that are being funded through domestic, development partner or private sector sources or a combination of sources. Therefore, it is envisaged that the priority programmatic will leverage co-financing through projects/programmes that work collaboratively with all sectors – government, non-government and civil society organisations, communities and the private sector, to maximise local buy-in and ownership.

The NDA informed by key strategic country positions and community input has a strong understanding of the programmatic areas and is well positioned to continue to facilitate country ownership and stakeholder buy-in through the project/programme cycle.

The design of the Country Programme is intended to highlight the priority programmatic areas of need in the context of climate change. Development partners can then align themselves and their particular area of comparative advantage to these priority programmatic areas. As a party to the Paris Agreement, the Cook Islands is applying the Financial Mechanism of the Convention of which the GCF is an operating entity. It is understood that the GCF serves this Agreement and therefore its support will be requested in meeting the contributions outlined in the Cook Islands INDCs, which have been incorporated into the Country Programme. The Adaptation Fund is also another climate change financing mechanism that the Cook Islands hopes to gain support from in order to achieve the objectives of the Paris Agreement in the national context.

Methodology for identifying priority programmatic areas

The Cook Islands 'No Objection' procedure is designed to embody the principle of country ownership and presents criteria for evaluating project/programme proposals. These criteria have also been applied to the development of the Country Programme.

The No Objection procedure checklist is in two parts. The first part ranks a program's Impact, Sustainability, Environment and Social Safeguards, Gender and Youth implications, transformative potential and innovativeness. The second part has four criteria and these are as follows:

Criteria 1: The funding proposal is aligned to the NSDP and national priorities.

- Is the funding proposal in compliance with national policies and laws?
- Will the funding proposal advance national adaptation/mitigation targets as defined in the INDC, GCF Country Programme, and other relevant documents?
- Will the funding proposal incur a debt burden on the Government of the Cook Islands?

Criteria 2: The funding proposal complements and does not duplicate ongoing projects or programmes.

- Does the funding proposal duplicate an existing project or programme?
- Does the funding proposal complement and add value to an existing project or programme?

Criteria 3: Affected communities, relevant local civil society, public and/or private sector entities have been consulted and actively involved in the planning and implementation.

- Have relevant stakeholders been consulted in the preparation of the funding proposal?
- Have risks been comprehensively assessed, and are there measures in place to manage negative environmental and social impacts?
- Has the funding proposal identified opportunities to build local capabilities and competencies?

Criteria 4: Proposal response to climate impacts.

- Is the proposal responding to key climate parameters, such as intense rainfall, high temperature, extreme weather events, intense rainfall, periods of drought, flooding and water intrusion, storms and winds, inundation, sea level rise, etc.?

The Cook Islands intends to refine and develop a more comprehensive prioritisation criteria with support from GCF Readiness funding.

3. The Cook Islands Portfolio

The implementation of the Country Programme will rely on the support of development partners, the GCF and the Accreditation Fund as climate change finance mechanism operating entities. The NDA will partner with key stakeholders and Accredited Entities to determine whether a programmatic area should be approached as one proposal or as a series of proposals taking into consideration the need, urgency and absorptive capacity of the country or communities to implement. The Ministry of Finance and Economic Management when confirmed as an Accredited Entity will be expected to program about one third of the projects in the Country Programme. The Bank of the Cook Islands is also seeking accreditation and will look to implement projects within the Country Programme.

The NDA or the Accredited Entity will apply to the GCF Project Preparation Facility (PPF) for support to develop projects identified in the Country Programme.

Programmatic Area 1: Renewable Energy Development

The Cook Islands has made good progress towards the achievement of its aspirational renewable energy targets of 50% of islands powered by renewable energy by 2015 and 100% by 2020. The transformation of electricity supply has been undertaken through four main work streams. The first, completing the northern islands with the construction of eight photovoltaic systems on six islands. The second, is the conversion of Mangaia, Mitiaro, Mauke and Atiu in the south. This is scheduled for completion in 2018. The third work stream addresses the transformation of Aitutaki. A staged approach is envisaged for Aitutaki's conversion. The final work stream focuses on Rarotonga, the more complex of the four work streams.

The Cook Islands hopes with the support of partners to further progress the advances made in ensuring that the country is powered by renewable and clean sources of energy, including the transformation of energy use in the transport sector. Investment in this sector, foremost, reduces the Cook Islands greenhouse gas emissions and air pollution. Renewable energy also has the ability to change lives for better and contributes to economic benefits. For example, with the implementation of renewable energy in the northern islands, they now have electricity for twenty four hours and are able to refrigerate their fish and sell onwards to Rarotonga. This has contributed to income generation and also health benefits of improved food storage.

As the country is small, isolated, dispersed and less diversified economically, we have an exceptional sensitivity to world energy prices. Renewable energy will therefore significantly de-couple our wellbeing from offshore energy sources. Investment in this programmatic area will develop substantial capacity to generate, manage and store energy (for off production peak time), vastly improve our local expertise in and ownership of renewable energy, transform our transport sector from petrol and diesel to clean sources, allow us to be energy self-sufficient in the long term and have the smallest carbon footprint possible and take every advantage that this offers us.

Elements of the Programme	Strategic Impact Areas	Key Partners
Expand renewable energy such as solar, wind, biomass, and other relevant electricity generation sources with a focus on tried and proven technologies	Low emission energy access and power generation	Renewable Energy Development Division (REDD) of the Office of the Prime Minister (OPM); Te Aponga Uira o Tumutevarovaro (TAU); Aitutaki Power Supply (APS); Island Governments, Private Sector, CSOs, Communities
Improve renewable energy storage capacity	Low emission energy access and power generation	Renewable Energy Development Division (REDD) of the Office of the Prime Minister (OPM); Te Aponga Uira o Tumutevarovaro (TAU); Aitutaki Power Supply (APS); Island Governments, Private Sector, CSOs, Communities
Implement energy efficiency in public buildings	Energy efficient buildings	Cook Islands Investment Corporation, Renewable Energy Development Division (REDD) of the Office of the Prime Minister (OPM); Te Aponga Uira o Tumutevarovaro (TAU);

		Aitutaki Power Supply (APS); Island Governments, Private Sector, CSOs, Communities
Implement energy efficient businesses and households	Low emission energy access and power generation	Renewable Energy Development Division (REDD) of the Office of the Prime Minister (OPM); Islands Governments, Private Sector, CSOs and Communities
Climate proof energy infrastructure through the integration of climate change risks and opportunities in the design, operation and management of infrastructure	Low emission energy access and power generation, Resilient infrastructure and built environments	Renewable Energy Development Division (REDD) of the Office of the Prime Minister (OPM); Te Aponga Uira o Tumutevarovaro (TAU); Aitutaki Power Supply (APS); Island Governments, Private Sector, CSOs, Communities
Promote the use of electric vehicles and other forms of transportation	Low emission transport	Renewable Energy Development Division (REDD) of the Office of the Prime Minister (OPM); Ministry of Transport; Private Sector, CSOs, Communities
Provide climate friendly shipping vessel to service the pa enua, including an inter-island vessel between Manihiki and Rakahanga, and Pukapuka and Nassau	Resilient infrastructure and built environments, livelihoods of people and communities	Infrastructure Cook Islands, Cook Islands Investment Corporation, Island Government, Private Sector, CSOs and Communities
Explore and implement means to incentivise the uptake of renewable energy, including the implementation of cheaper financing options for the private sector, households and communities	Low emission energy access and power generation, Low emission transport	Renewable Energy Development Division (REDD) of the Office of the Prime Minister (OPM); Ministry of Finance and Economic Management (MFEM)
Accredited Entity MFEM BCI (potentially, seeking accreditation) ADB (potentially)	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Develop Concept Note/s; Seek support from the Project Preparation Facility (PPF) to develop projects/programme.		

Programmatic Area 2: Coastal Protection and Restoration

It is acknowledged that foreshores change their form in response to natural geomorphic processes, shifts in natural conditions and human impacts. It is also recognised that the foreshore is a dynamic boundary that responds to relative movements of land and water. A range of external forces including erosion, inundation processes, as well as the effects of climate change operate on Cook Islands foreshores. The type and magnitude of the governing processes, and the foreshore characteristics (e.g. vegetation cover, foreshore elevation) can result in net erosion or accretion of the foreshore, inundation and sedimentation of the lagoon.

As low lying islands, the entire Cook Islands is vulnerable to sea surges, sea level rise and extreme weather events. Communities have been experiencing over many years land loss, as shorelines recede into the sea, damaging infrastructure, housing, and natural habitats. This in turn results in other detrimental impacts such as inundation of planting and residential areas, threatening food security and livelihoods, increase in vector borne diseases, other health impacts and so forth. This is particularly acute on the northern group atolls.

Consultations with communities have indicated that the problem is being exacerbated by the rising tides, more frequent sea surges and king tides caused by climate change. Coastal protection and restoration is essential for building resilience of both built and natural environments and for maintaining the livelihoods of communities.

Coastal land loss demands a focused and coordinated effort by all stakeholders, including Government, development partners, the private sector and communities. Community consultations have indicated that a mix of protective and restoration approaches should be taken depending on the assessment of vulnerable areas. Such approaches include, revegetation, bioengineering, utilisation of technologies that have been proven to work in the Cook Islands (coastal protection units), construction of gabions, walling, revetments, re-nourishment and replacement of sand, groynes/headlands and flow modification. In identifying the most appropriate approach, the site specific natural character, natural processes, effects of climate change and public values need to be considered and incorporated into the solution. Structural protection should only be built where necessary and managed so that any additional adverse effects can be avoided or reduced.

Investment in this programmatic area will identify the best approaches (natural and man-made and/or direct and indirect) for protection and/or restoration, in highly vulnerable areas, improve knowledge, awareness and understanding of our land and seascape, and protect coastal habitats and infrastructure.

Elements of the Programme	Strategic Impact Areas	Key Partners
Strengthen institutions, human resources, awareness and knowledge for resilient coastal management through capacity building, education and awareness	Resilient people and communities, built environments, ecosystems and ecosystem services	Ministry of Education, Infrastructure Cook Islands, National Environment Services, Private Sector, Island Governments, CSOs and Communities
Implement coastal protection and restoration measures (including both hard and soft structures) in key vulnerable areas identified on all islands	Resilient built infrastructure and environments, ecosystems and ecosystem services and communities	Infrastructure Cook Islands, Natural Environment Services, Ministry of Agriculture, Island Governments, Private Sector, CSOs and Communities

Reduce the vulnerability of key coastal infrastructure including homes, roads and other public infrastructure	Resilient built infrastructure and environments, people and communities	Infrastructure Cook Islands, Cook Islands Investment Corporation, Island Governments, Private Sector, CSOs and Communities
Implement small grants scheme for coastal protection in the pa enua	Resilient built infrastructure and environments, people and communities	Climate Change Cook Islands (CCCI) division of the Office of the Prime Minister (OPM); Island Governments and Communities
Accredited Entity MFEM ADB (potentially)	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Develop Concept Note/s; Seek support from the Project Preparation Facility (PPF) to develop projects/programme.		

Programmatic Area 3: Water security

Water is a primary medium through which climate change will impact people, ecosystems and economies. Changes in rainfall patterns and variability is increasingly challenging the supply of water to meet the needs of our population. The quality of water is also a shared problem across all islands. This has negative health implications. Where there are water distribution networks, these are aged and losses add to the challenge. Agriculture also requires water and any reduction or limitations in the availability of water, compromises consistent food production and security, again impacting on health. Additionally, sanitation and flush toilets places pressure on limited water resources (particularly in the northern islands) where rainwater harvesting is the primary source of water.

Investing in the programmatic area will focus on improving information, institutions and infrastructure relating to water security. Understanding the dynamics of rainfall variability and future climate change as they affect water supply and demand across all water using sectors requires information to inform decision making. Building the capacity of institutions in the water sector to respond to these dynamics will enable better resource management. Combined with the right infrastructure (distributing water over space and time, storage and desalination to recover freshwater) together with implementation of water conservation, reuse and recycling, is a way of insuring against climate change impacts. This investment will also enable the Cook Islands to move beyond water security and take fuller advantage of the economic, environmental benefits that can be derived from wiser water use.

Elements of the Programme	Strategic Impact Areas	Key Partners
Increase understanding of the dynamics of variability and climate change implications	Building resilience through health, food and water security, building resilient livelihoods of people and communities	National Metrological Service, Climate Change Cook Islands (CCCI) division of the Office of the Prime Minister (OPM); Infrastructure Cook Islands, Ministry of Finance and Economic Management, Island Governments, Private Sector, CSOs and Communities
Strengthen water resource management	Building resilience through health, food and water security, building	Infrastructure Cook Islands, Ministry of Finance and

	resilient livelihoods of people and communities	Economic Management, Cook Islands Investment Corporation, Island Governments, Private Sector, CSOs and Communities
Increase water storage capacities on all islands	Building resilience through health, food and water security, building resilient livelihoods of people and communities	Climate Change Cook Islands (CCCI) division of the Office of the Prime Minister (OPM); Infrastructure Cook Islands, Ministry of Finance and Economic Management, Cook Islands Investment Corporation, Island Governments, Private Sector, CSOs and Communities
Address water distribution losses and putting in place new distribution systems where required	Building resilience through health, food and water security, building resilient livelihoods of people and communities, Resilient infrastructure	Infrastructure Cook Islands, Cook Islands Investment Corporation, Island Governments, Private Sector, CSOs and Communities
Improve waste water treatment and recycling	Building resilience through health, food and water security, building resilient livelihoods of people and communities, Resilient infrastructure	Infrastructure Cook Islands, Island Governments, Cook Islands Investment Corporation, Private Sector, CSOs and Communities
Explore options for desalination	Building resilience through health, food and water security, building resilient livelihoods of people and communities	Infrastructure Cook Islands, Emergency Management Cook Islands (EMCI) division of the Office of the Prime Minister (OPM), Cook Islands Investment Corporation, Island Governments, Private Sector, CSOs and Communities
Improve water management and water conservation, including rainwater harvesting, recycling and reuse of water, water conservation awareness campaigns, technology for water conservation in water services and supply, and improved watershed management	Building resilience through health, food and water security, building resilient livelihoods of people and communities	Infrastructure Cook Islands, Emergency Management Cook Islands (EMCI) and Climate Change Cook Islands divisions of the Office of the Prime Minister (OPM), National Environment Service, Island Governments, Private Sector, CSOs and Communities
Explore and implement options for water supply for agriculture, including appropriate management and irrigation	Building resilience through health, food and water security, building resilient livelihoods of people and communities	Infrastructure Cook Islands, Ministry of Agriculture, National Environment Service, Island Governments, Private Sector, CSOs and Communities
Explore and implement options for water supply for sanitation	Building resilience through health, food and water security, building resilient livelihoods of people and communities	Ministry of Health, Infrastructure Cook Islands, National Environment Service, Cook Islands Investment Corporation, Island Governments, Private Sector, CSOs and Communities
Accredited Entity MFEM	Total Financing:	Submission Timeframe To be determined

Potential for regional cooperation with some elements of the programme	To be determined and dependent on project preparation process	
Action: Develop Concept Note/s; Seek support from the Project Preparation Facility (PPF) to develop project.		

Programmatic Area 4: Disaster Risk Management

The Cook Islands by virtue of its geography is extremely vulnerable to disasters and extreme climate events. While the country has in place legislative and institutional structures to enable preparedness, response and recovery, national funding for adequate preparedness is insufficient. With the lives of people at risk during disasters and extreme climate events, and the prediction that extreme events will intensify with climate change, further investment is required to build resilience and safeguard lives. Strengthening national meteorological and hydrological services is also essential for preparedness, monitoring of the climate, forecasting climatic conditions and so forth.

Investment in this programmatic area will reassure safety, security and preparedness from disasters and extreme events. It will guarantee that appropriate measures are in place to safeguard lives in times of disasters and extreme events.

Elements of the Programme	Strategic Impact Areas	Key Partners
Improve cyclone and disaster safety shelters through upgrading existing facilities and constructing new shelters in Rarotonga, Aitutaki, Mangaia, Mauke, Atiu, Mitiaro, Nassau, Rakahanga, Penryhn and Suvarrow	Resilient Infrastructure and built environments, and livelihoods of people and communities	Emergency Management Cook Islands (EMCI) division of the Office of the Prime Minister (OPM), Infrastructure Cook Islands, Cook Islands Investment Corporation, Island Governments, Communities
Construct a National Operations Centre, including telecommunications services	Resilient Infrastructure and built environments, and livelihoods of people and communities	Emergency Management Cook Islands (EMCI) division of the Office of the Prime Minister (OPM), Cook Islands Police Service, Infrastructure Cook Islands, Cook Islands Investment Corporation
Strengthen national, community and sectoral participatory and gender responsive disaster risk management planning (relating to events resulting from climate conditions), including mapping of key vulnerabilities	Resilient livelihoods of people and communities	Emergency Management Cook Islands (EMCI) and Climate Change Cook Islands divisions of the Office of the Prime Minister (OPM), Public Service Commission, Private Sector, CSOs, Island Governments and Communities
Strengthen National meteorological and hydrological services, including capacity building	Resilient livelihoods of people and communities	National Meteorological Services, Island Governments, Private Sector, CSOs and Communities
Implement measures to address loss and damage from climate change	Resilient livelihoods of people and communities	Ministry of Finance and Economic Management, Private Sector and Communities

Accredited Entities MFEM Potential for regional cooperation with the meteorological and hydrological element of the programme.	Total Financing: To be determined and dependent on project preparation process utilising the existing assessments for preparedness for disasters and extreme events	Submission Timeframe To be determined
Action: Refine assessments and develop Concept and project/programme proposal. Work regionally to find synergies in the meteorological and hydrological space.		

Programmatic Area 5: Waste Management

Waste management is a significant issue for the Cook Islands. In relation to solid waste, although efforts are undertaken to encourage the practice of Reduce, Reuse and Recycle. Solid waste management systems are vulnerable with landfill flooding, due to extensive rainfall, carrying the risk of ground water contamination. Increased temperatures equates to increased levels of combustion at sites. Currently there are built waste management facilities on only Rarotonga and Aitutaki, which are near capacity. The rest of the islands practice open dumping, which has detrimental impacts on ecosystems, health and community livelihoods. Dumpsites, which are usually located at low levels and excavated with little planning and hydraulic protection.

In sanitation, although the Ministry of Health has established sanitation standards, given the age and condition of the majority of systems, there is evidence that excess nutrients from septic systems are ending up in streams, water tables and the lagoon. The impact of both solid waste and sanitation through not directly attributed to climate change, does exacerbate the negative impacts being experienced in the lagoon, as a result of climate change and extreme weather events. The health of the land and lagoon is strongly linked to climate change impact areas of ecosystems and ecosystem services; health, food and water security and livelihoods of people and communities. The importance of adapting the current waste management structures and processes is high and deserves greater attention in relation to climate change. Solutions will strengthen resilience and the ability to adapt to the impacts of climate change.

Therefore investment in this programmatic area has immense benefits on the health of people and ecosystem services. It also has significant implications on building resilience of the economy given the dependence on healthy ecosystem services to sustain tourism and agriculture.

Elements of the Programme	Strategic Impact Areas	Key Partners
Explore and implement opportunities for better management of solid waste, including the construction of waste management facilities on all islands and turning waste to energy	Health, food and water security, ecosystem and ecosystem services, infrastructure and built environments, resilient livelihoods of people and communities, energy generation and access, land use	Infrastructure Cook Islands, National Environment Service, Ministry of Health, Ministry of Marine Resources, Island Governments, Private Sector, CSOs and Communities
Explore and implement opportunities to safely use non-biodegradable waste products to substitute natural materials in construction and development	Infrastructure and built environments, resilient livelihoods of people and communities, energy generation and access, land use	Infrastructure Cook Islands, National Environment Service, Ministry of Health, Islands Governments, Private Sector, CSOs and Communities

Implement appropriate and relevant sanitation solutions on all islands, including the replacement of current systems and the use of waterless/compost toilets	Health, food and water security, ecosystem and ecosystem services, infrastructure and built environments, resilient livelihoods of people and communities	Infrastructure Cook Islands, National Environment Service, Ministry of Health, Islands Governments, Private Sector, CSOs and Communities
Accredited Entities MFEM SPREP (Potentially) ADB (Potentially)	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Refine assessments and develop Concept and Project proposal.		

Programmatic Area 6: Climate Proofing Infrastructure

As all islands are vulnerable to impacts of climate change, including more severe extreme weather events, sea surges and sea level rise. It is essential that key public, private sector and domestic infrastructure are not only protected, but also constructed and developed in a manner that takes into account the mentioned impacts. Priority infrastructure requiring climate proofing are ports, airports and buildings.

The airports on all islands are close to the sea and susceptible to damage. With the exception of Rarotonga and Aitutaki, where there are airports on other islands, these are constructed from crushed coral and therefore also vulnerable to deluge conditions, in addition to damage from the sea. They need to be strengthened to allow them to withstand torrent and sea surges. Strengthening of airports should also be done in parallel with protection of the coast near airports.

With the exception of Rarotonga, current harbours in the outer islands require ships to moor offshore for unloading and loading of cargo and passengers. Handling of cargo and passengers is a challenge and can be dangerous, particularly when the weather conditions are not ideal. Harbour facilities, therefore need to take into consideration the predicted worsening climate impacts. Additionally, when boats are unable to offload cargo and passengers, they drift until the weather clears, burning fuel. Improvement of harbours is also thus, a means of reducing emissions by limiting drift time for boats. Consideration should also be given to the possibility to ensure quick evacuation and safety during time of disaster.

Future infrastructure development in all islands should incorporate climate proofing in design and construction. This will equate to increased costs, which is an additional burden on either government, the private sector or homeowners depending on the development project. The private sector and individuals require some assistance such as cheaper financing options to incentivise climate proofing infrastructure.

Investment in this programmatic area will ensure overall climate proofing where infrastructure will be able to withstand the impacts of climate change, maintain connectivity, enable economic activity and build a more holistic resilience of livelihoods, people and communities.

Elements of the Programme	Strategic Impact Areas	Key Partners
Climate proof and develop harbours facilities in Aitutaki, Penryhn, Pukapuka, Nassau, Palmerston, Rakahanga and Atiu	Resilient infrastructure and built environments, livelihoods of people and communities	Infrastructure Cook Islands, Cook Islands Investment Corporation, Island Government, Private Sector, CSOs and Communities

Climate proof the airports across all inhabited islands	Resilient infrastructure and built environments, livelihoods of people and communities	Infrastructure Cook Islands, Cook Islands Investment Corporation, Island Government, Private Sector, CSOs and Communities
Explore and implement cheaper financing and grant options to incentivise and support the private sector and communities to climate proof their infrastructure	Resilient infrastructure and built environments, livelihoods of people and communities	Ministry of Finance and Economic Management (MFEM), Infrastructure Cook Islands, National Environment Service, Private Sector, CSOs and Communities
Accredited Entities MFEM BCI (Potentially, seeking accreditation) ADB (Potentially)	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Develop Concept Note/s; Seek support from the Project Preparation Facility (PPF) to develop project		

Programmatic Area 7: Flood Management

Predications are that climate change will significantly worsen the threat of flooding in the future. Flood management is already an issue on Rarotonga resulting in the erosion of river banks and the foreshore and with the run off into the lagoon causing stress on the marine environment. Increase in severe tropical storms and rainfall variability, the impacts of storm surges seriously undermines flood protection. The related issue of waste management becomes more profound during flood events. The combination of these factors critically affects the livelihoods of people and communities, infrastructure and built environments, and ecosystem and ecosystem services. It is obvious that there is a need to properly invest in flood defences in order to keep pace with climate change and protect homes and infrastructure from flooding. Recent flooding events have demonstrated the adverse impacts on personal and emotional psychology and livelihoods. The economic cost of flooding is considerable and prompts need for action.

Investment in this programmatic area will protect individuals, communities, businesses and the economy in general by building resilience of landscapes and infrastructure. The flow on effects of such an investment will be significant to people's livelihoods and the economy.

Elements of the Programme	Strategic Impact Areas	Key Partners
Build capacity to pursue an integrated approach to reduce the vulnerability of communities to flooding. This includes understanding the connectivity of properties to streams, watersheds and rehabilitation, health, awareness building, regulatory and permitting, early warning systems, and so forth	Resilient health, food and water security; infrastructure and built environments, ecosystem and ecosystem services and livelihoods and communities	Infrastructure Cook Islands, Ministry of Health, National Environment Service, Private Sector, CSOs and Communities
Rehabilitation of rivers and stream banks (including both hard and soft responses) to accommodate increased water flow and decrease flood risks and impact on-flows	Resilient health, food and water security; infrastructure and built environments, ecosystem and ecosystem services and livelihoods and communities	Infrastructure Cook Islands, Ministry of Health, National Environment Service, Private Sector, CSOs and Communities
Upgrading key drainage systems, bridges and roads affected by excessive	Infrastructure Cook Islands, Ministry of Health, National	Infrastructure Cook Islands, Ministry of Health, National

water flows in agricultural areas, occupied/habitable areas	Environment Service, Private Sector, CSOs and Communities	Environment Service, Private Sector, CSOs and Communities
Regulating use of wetlands for development as a resilient measure	National Environment Service, Private Sector, CSOs and Communities	National Environment Service, Private Sector, CSOs and Communities
Accredited Entities MFEM	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Develop Concept Note/s; Seek support from the Project Preparation Facility (PPF) to develop project		

Programmatic Area 8: Agriculture and Ecosystem Based Adaptation

Rising temperatures, variable rainfall, salt water intrusion, pollution of the ground and water table, all impact on ecosystems and agricultural production. With the predictions of more adverse impacts of climate change these effects will become more acute on the livelihoods of people and communities, food security and the ability of ecosystem services to fulfil their purposes. Impacts experienced are reduced agricultural production, changes in the suitability of land for crop production, availability of water, changes in the duration of growing seasons, lower yields, loss of income, increase in negative coping mechanisms, and instability of food supply, reduced nutrition and wellbeing. This is exacerbated by human actions, such as land clearance and overuse, intensive agriculture and unsustainable agricultural practices. These actions contribute to land degradation, water insecurity and erosion.

Investment in this programmatic area will strengthen the resilience of farmers and institutional support systems for climate smart agriculture; enhance ecosystem services through reforestation; reinforce sustainable agricultural practices and enrich adaptive capacity for agricultural production utilising technology. The effects of these actions will enhance livelihoods, improve health and wellbeing, food security, promote sustainable land use and have the co-benefits of economic gain, particularly for farmers.

Elements of the Programme	Strategic Impact Areas	Key Partners
Strengthen climate change and agriculture individual and institutional capacities of improved ecosystem management, including: defining guidelines for sustainable land development (incorporating the use of taro wetlands) and climate smart agriculture; mapping specific areas for specialised use; disseminating climate and agriculture information to communities; and training and outreach.	Enhanced livelihoods of people and communities, increased health wellbeing, food and water security, resilient ecosystems, sustainable land use and forest management	Ministry of Agriculture, Ministry of Health, National Environment Service, National Metrological Services, Island Governments, Private Sector, CSOs and Communities
Promote reforestation and protecting soil against erosion with activities including: replanting of native and fruit trees; practice mulching as erosion prevention; eradication of invasive species.	Enhanced livelihoods of people and communities, increased health wellbeing, food and water security, resilient ecosystems, sustainable land use and forest management	Ministry of Agriculture, National Environment Service, Island Governments, Private Sector, CSOs and Communities

Strengthen sustainable agriculture including: improving water supply and irrigation; increasing planting of climate resilient crops; scaling up of climate resilient and organic farming practices; improving conservation, processing and marketing of farm productions; organising producer groups and facilitating partnerships; creating and enhancing income generating activities for farmers	Enhanced livelihoods of people and communities, increased health wellbeing, food and water security, resilient ecosystems	Ministry of Agriculture, National Environment Service, Island Governments, Private Sector, CSOs and Communities
Implement alternative agriculture technologies including greenhouses, hydroponics, etc.	Enhanced livelihoods of people and communities, increased health wellbeing, food and water security, resilient ecosystems	Ministry of Agriculture, National Environment Service, Island Governments, Private Sector, CSOs and Communities
Accredited Entities MFEM FAO (Potentially) SPREP (Potentially) Potential for regional cooperation in some elements of the programme	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Develop Concept Note/s; Seek support from the Project Preparation Facility (PPF) to develop project		

Programmatic Area 9: Ocean Management

The Cook Islands exclusive economic zone, recently designated as a large multiple-use marine protected area called Marae Moana, is being impacted by changing climatic conditions. Whilst local impacts on the marine environment can be managed, climate change presents issues beyond our control. Ocean acidification weakens the physical structure of skeletons and shells of living things. Coral bleaching causes mass mortality of coral reefs. Warmer sea surface temperatures and increased runoff to coral reefs have also been implicated as a contributing cause of Harmful Algal Blooms (HABs) and nuisance algal blooms. The prescription for addressing these issues is to manage local impacts better. This includes reducing sedimentation as a result of earthworks and road construction, reducing pollution from wastewater, storm water and the leachate of solid waste, minimising contamination from coastal development, and establishing marine protected areas. Such actions require a holistic and multidisciplinary approach, using transparent and socially responsible processes. Investment in this programmatic area will address these issues, noting the interconnectivity with other areas of the Country Programme to build overall resilience to the impacts of climate change.

Elements of the Programme	Strategic Impact Areas	Key Partners
Improve information on ocean biodiversity, particularly the deep ocean, including improved information management systems	Enhanced knowledge for building resilient livelihoods of people and communities, ecosystems and ecosystem services	Marae Moana division of the Office of the Prime Minister, Ministry of Marine Resources, Seabed Minerals Authority, Research Institutions, CSOs, Communities
Establish a process of marine spatial planning, surveillance and review	Enhanced capacity for building resilient livelihoods of people and	Marae Moana division of the Office of the Prime Minister,

	communities, ecosystems and ecosystem services	Ministry of Marine Resources, Seabed Minerals Authority, National Environment Service, Private Sector, CSOs, Communities
Building human resources capacity for ocean management including capacity in the private sector to achieve tourism accreditation	Enhanced capacity for building resilient livelihoods of people and communities, ecosystems and ecosystem services	Marae Moana division of the Office of the Prime Minister, Ministry of Marine Resources, Seabed Minerals Authority, National Environment Service, Cook Islands Tourism Corporation, Private Sector, CSOs, Communities
Accredited Entities MFEM SPREP (Potentially) Conservation International (Potentially) IUCN (Potentially) UNDP (Potentially) Potential for regional cooperation in some elements of the programme	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Develop Concept Note/s; Seek support from the Project Preparation Facility (PPF) to develop project		

Programmatic Area 10: Building Resilient Livelihoods of People and Communities

The Cook Islands and peoples are extremely vulnerable to the impacts of climate change and the socio-economic, infrastructure and environment pressures intensifies this vulnerability. The key characteristics of building resilience in the Cook Islands context is to ensure that the government, private sector, communities and households have the ability to adapt to changes, anticipate what might happen next and absorb shocks when they do come along. With more frequent dry periods, stronger storms, creeping sea level rise, changes in agriculture productivity and the marine environment, it is essential that families, communities and the private sector can manage and improve their ability to bounce back. It is important to build the adaptive capacity to reduce the impact of future hazards.

During private sector and community consultations for the development of the Green Climate Fund Country Programme, people have indicated that one of the hindrances to building their resilience to climate change as well as investing in mitigation is the lack of funding and cost of financing. Funding availability either through grants, cheaper financing and enabling policies such as tax breaks will assist people to build resilience. Investment in this programmatic area will ensure that these concerns are addressed and that resilience will be built at the household, business, community and national levels.

Elements of the Programme	Strategic Impact Areas	Key Partners
Establish funding mechanism/s to support mitigation and adaptation actions for communities, private sector and households	Enhanced mitigation and adaptation capacities of people and communities	Ministry of Finance and Economic Management, Climate Change Cook Islands and Renewable Energy Development divisions of

		the Office of the Prime Minister, Bank of the Cook Islands, Private Sector, CSOs, Communities
Explore and implement incentive programmes to increase private sector and communities participation in mitigation and adaptation actions	Enhanced capacity for building resilient livelihoods of people and communities, ecosystems and ecosystem services	Ministry of Finance and Economic Management, Climate Change Cook Islands and Renewable Energy Development divisions of the Office of the Prime Minister, Bank of the Cook Islands, Private Sector, CSOs, Communities
Accredited Entities MFEM BCI (Potentially, currently seeking accreditation)	Total Financing: USD 50 million	Submission Timeframe To be determined
Action: Develop Concept and Project documents.		

Programmatic Area 11: Knowledge, Research and Innovation

Our capacity to implement climate change activities is constrained by a shortage of human resources in the relevant technical areas. Building knowledge, including traditional knowledge, on climate change will close gaps in comprehension, awareness and action in dealing with both the challenges and opportunities presented and anticipated as a result of climate impacts. We must also build capacity for efficient and effective use of climate knowledge, together with enhancing research on the many aspects and the multifaceted nature of climate change. It is anticipated that this will result in some innovative, locally relevant solutions to the challenges of climate change. Investment in this programmatic area will enable knowledge, research and innovation with the overall aim of building resilience to climate change impacts. This also offers opportunities for sharing and south-south cooperation with other countries with similar circumstances.

Elements of the Programme	Strategic Impact Areas	Key Partners
Provide incentives for the private sector and institutions of higher learning to undertake research and innovation to develop affordable and locally appropriate adaptation and mitigation technologies	Enhanced livelihood of people and communities, increased health and wellbeing, and food and water security, resilient ecosystems and ecosystem services, resilient infrastructure and built environment to climate change	National Research Committee, Climate Change Cook Islands division of the Office of the Prime Minister, Higher learning institutions, Private Sector, CSOs, Communities
Establish mechanisms to encourage and facilitate locally appropriate climate change responses, including traditional knowledge and science based initiatives	threats, energy efficient buildings, industries and communities, low emission energy access and power generation, low emission transport, improved land use	Climate Change Cook Islands division of the Office of the Prime Minister, Ministry of Education, Ministry of Culture, National Environment Service, Traditional Leaders, Private Sector, CSOs, Communities
Link government, private sector, academic and civil society		Climate Change Cook Islands and Renewable Energy Development divisions of

organisations with global climate change innovation institutions		the Office of the Prime Minister, Ministry of Education, Ministry of Culture, National Environment Service, Traditional Leaders, Private Sector, CSOs, Communities
Strengthen the incorporation of climate change into the school curriculum		Ministry of Education
Provide incentives for the study of climate change related courses, and training to build capacity in areas related to climate change		Ministry of Education
Accredited Entities MFEM	Total Financing: To be determined and dependent on project preparation process	Submission Timeframe To be determined
Action: Develop Concept and Project documents.		

4. GCF Project Preparation Pipeline

The following table summarises the programmatic areas that will require support from the GCF Project Preparation Pipeline:

Programme Title	Description	Accredited Entity	Funding support
Renewable Energy Development	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM BCI (potentially, seeking accreditation) ADB (potentially)	GCF: USD 1 million Co-finance: USD 200,000
Coastal Protection and Restoration	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM ADB (Potentially)	GCF: USD 1 million Co-finance: USD 200,000
Water Security	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM	GCF: USD 1 million Co-finance: USD 200,000
Waste Management	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM SPREP (Potentially) ADB (Potentially)	GCF: USD 1 million Co-finance: USD 500,000
Climate proofing Infrastructure	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM BCI (potentially, seeking accreditation) ADB (potentially)	GCF: USD 500,000 Co-finance: USD 150,000

Flood Management	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM	GCF: USD 1 million Co-finance: USD 200,000
Agriculture and Ecosystem based Adaptation	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM FAO (potentially) SPREP (potentially)	GCF USD 500,000 Co-finance: USD 100,000
Ocean Management	Support to prepare feasibility study, integrated financial model, Environment and Social Impact Assessment or Environment and/or Social Management Plan, develop the full project proposal.	MFEM SPREP (potentially) IUCN (potentially) UNDP (potentially) Conservation International (potentially)	GCF USD 200,000 Co-finance: USD 100,000

5. Country GCF Readiness Pipeline

Title	Description	Delivery Partner	Submission timeframe
<i>Strengthening the implementation of the Country Programme</i>	Strengthen the implementation of the Country Program through Concept Development, and continued capacity building for stakeholders, as well as support the process leading to accreditation with the GCF for the Bank of the Cook Islands. An additional component begins the planning and undertaking of the enhanced Cook Islands Nationally Determined Contribution to the Paris Agreement, with the final component sets out the planning and undertaking of a comprehensive risk assessment program in key sectors, as an integral part of the Country Program and climate proofing approach adopted by the Government	MFEM - DCD, BCI, OPM-CCCI	October 2018
		Total financing:	Status
		USD 962,550	Proposal submitted and awaiting GCF Secretariat Feedback
Action	Lead	Timeline	
Dependent on feedback from the GCF Secretariat	<i>E.g NDA, Delivery Partner, GCF</i>	24 months from approval	

6. GCF Accreditation Pipeline

Entity Name	Type	Action	Lead	Timeline
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Bank of the Cook Islands (BCI)	Bank	Complete the requirements for accreditation to the GCF	BCI	<i>2018-2019</i>
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7. Implementing the Country Programme – Improving Coordination

To ensure that the Cook Islands is ready to implement the Climate Change Country Programme, it must have the capacity to plan for, access, deliver, and monitor and report on climate finance, in ways that incite the achievement of national development priorities, Cook Islands Climate Change Policy, Sustainable Development Goals and the Paris Agreement. In short, the Cook Islands has to be climate finance ready.

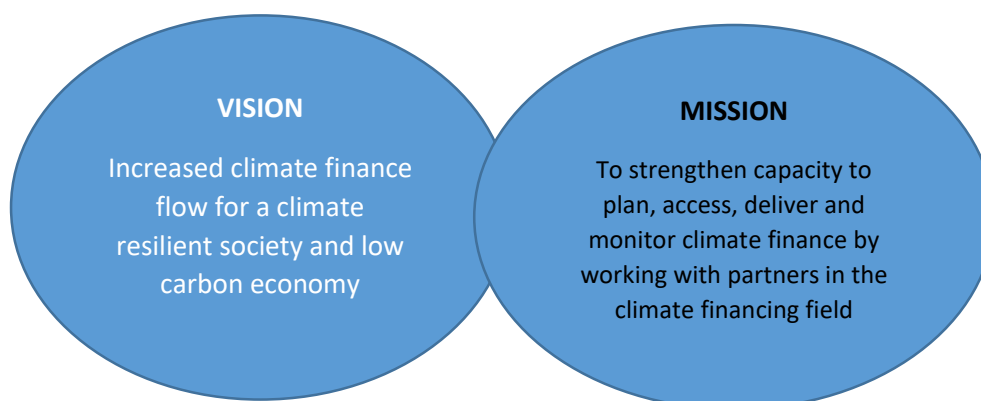
The following table outlines the key components of climate finance readiness that the Cook Islands will need to undertake:

FINANCIAL PLANNING	ACCESSING FINANCE
<ul style="list-style-type: none"> • Assess needs and priorities and identify barriers to investment • Identify policy mix and sources of financing 	<ul style="list-style-type: none"> • Directly access finance • Blend and combine finance • Formulate project, programme, sector wide approaches to access finance
DELIVERING FINANCE	MONITOR, REPORT AND VERIFY
<ul style="list-style-type: none"> • Implement and execute project, programme, sector approaches • Build local supply of expertise and skills • Coordinate implementation 	<ul style="list-style-type: none"> • Monitor, report and verify flows • Performance based payments

These components that characterise climate finance readiness anchor the Cook Islands efforts in coordinating the implementation of the Country Programme.

Vision and Mission

The vision and mission for the implementation of the Climate Change Country Programme are:



Step 1: The Coordination Structures

Strategic Objective 1.1: Strengthen tracking and accountability systems of climate finance.

Strategic Objective 1.2: Improve mechanisms for prioritising project pipeline development of programmatic priority areas.

Strategic Objective 1.3: Strengthen co-financing mechanisms at all levels.

Strategic Objective 1.4: Strengthen collaboration/partnership mechanisms between all stakeholders to support implementation of the proposed actions in implementing the Country Programme.

Strategic Objective 1.5: Initiate and enhance engagement with the Private Sector.

Strategic Objective 1.6: Strengthen the CCCI/NDA's technical capacity to monitor and evaluate projects and programmes funded through climate financing.

Step 2: Partnerships and Co-financing

Strategic Objective 2.1: Strengthen partnerships amongst Accredited Entities, development partners and relevant Executing Entities.

Strategic Objective 2.2: Establish an information platform that informs and monitors the performance and progress of project development, execution and impact.

Strategic Objective 2.3: Raise awareness of potential co-financing in non-state actors.

Strategic Objective 2.4: Improve engagement between CCCI/NDA and external stakeholders.

Strategic Objective 2.5: Promote engagement of the private sector in financing and implementing the paradigm shift towards low emission and climate resilient development pathways.

Strategic Objectives 2.6: Strengthen knowledge management mechanisms to enable key stakeholders to access, manage and exchange information.

Step 3: Technical Capacity of Stakeholders

Strategic Objective 3.1: Strengthen knowledge generation, management and sharing amongst stakeholders.

Strategic Objective 3.2: Strengthen the capacity of stakeholders to mobilise, engage, collaborate with key players and create partnerships.

Strategic Objective 3.3: Build the capacity of staff in national Accredited Entities and Executing Entities to develop bankable climate change project proposals.

Strategic Objective 3.4: Strengthen private sector capacity to support the implementation of the Climate Policy and the Country Programme, and actions relating to these guiding documents.

THE COOK ISLANDS CLIMATE CHANGE COUNTRY PROGRAMME COORDINATION FRAMEWORK

Step 1: The Coordination Structures

STRATEGIC OBJECTIVES	DESCRIPTION OF ACTIONS	RESPONSIBILITY	1 YEAR	2-4 YEARS	> 5 YEARS	INDICATOR
1.1 Strengthen tracking and accountability systems of climate finance	Promote transparency and accountability in climate finance flows and expenditure	MFEM (Treasury and DCD) CCCI	•	•	•	<ol style="list-style-type: none"> # of institutions tracking climate finance Develop a system of checks and balances for monitoring climate finance flows Develop a format for M&E and reporting
	Effective institutional arrangement for managing, monitoring and coordinating climate finance, including clear roles and responsibilities for different actors	CCCI MFEM (Treasury and DCD)	•	•		Six monthly performance dashboard
	Coordinate with other agencies/ministries and ensure that climate finance is integrated into budgeting and planning processes as an important starting point for tracking and reporting climate finance across the various sectors and at the national level	CCCI MFEM (Treasury and DCD)	•	•		Mainstreamed climate finance in country planning processes
1.2 Improve mechanisms for prioritising project pipeline development of programmatic priority areas	<ol style="list-style-type: none"> Facilitate and support a structured dialogue involving all relevant stakeholders to discuss the Country Programme Work closely with private sector with clear green growth plans in developing projects Map out identified projects which will need climate finance to unlock stagnation 	CCCI	•	•	•	<ol style="list-style-type: none"> # of projects included in the pipeline Pre-identified scope of focus by CCCI/NDA
	Document simple guidelines and process to aid potential organisations	CCCI	•			# of guidelines produced
	Targeted awareness creation, orientation and relevant training for interested organisations	CCCI MFEM (DCD)	•	•	•	# of trainings and trained personnel

	Identify opportunities for co-financing	CCCI MFEM (Treasury and DCD)	•	•	•	# of projects successfully implemented through collaboration
1.3 Strengthen co-financing mechanisms at all levels	Identify opportunities to add value by co-financing projects and programs together with GCF, Adaptation Fund, GEF, ADB and other regional and multilateral organisations, and bi-lateral development partners	CCCI MFEM (DCD)	•	•	•	1. Amount of money allocated for co-financing 2. # of co-financed projects
1.4 Strengthen collaboration/partnership mechanism between all stakeholders to support implementation of the proposed actions in implementing the Country Programme	Implement this Strategy Coordination Framework	CCCI (lead) All relevant stakeholders	•	•	•	# of successful actions proposed in the Country Programme
	Identify and build capacity of relevant staff where project implementation occurs	CCCI (lead) All relevant stakeholders	•	•	•	1. # of capacity building trainings 2. # of personnel whose capacity has been built
1.5 Initiate and enhance engagement with the Private Sector	Increase engagement with the Private Sector in contributing to climate resilience and low emission investment and potential funding modalities	CCCI Private Sector	•	•	•	# of projects involving the private sector
1.6 Strengthen the CCCI/NDA's technical capacity to monitor and evaluate projects and programmes funded through climate finance	Train staff in proposal development, programme design and project management cycle	CCCI	•	•	•	# of staff trained on proposal and concept note formulation
Step 2: Partnerships and Co-financing						
2.1 Strengthen partnerships amongst AEs, development partners and relevant EEs	1. Availability of CCCI/NDA services 2. Publication of climate finance information online 3. Bi-annual climate finance roundtable	CCCI MFEM (DCD)	•			# of engagements
2.2 Establish an information platform that informs and monitors the performance and progress of project development, execution and impact	Regularly publish online information on climate change and climate change financing in the Cook Islands including projects and contacts amongst others	CCCI		•		Updated website

2.3 Raise awareness of potential co-financing in non-state actors	1. Establish Technical Assistance team to guide on how to access co-financing 2. Organise annual workshop on climate finance	CCCI MFEM (Treasury and DCD)		•		# of secured co-financed projects
2.4 Improve engagement between CCCI/NDA and external stakeholders	Keep stakeholders engage in the process through regular communication, platform meetings, community meetings, etc.	CCCI All relevant	•	•	•	Feedback on engagement survey results
2.5 Promote engagement of the private sector in financing and implementing the paradigm shift towards low emission and climate resilient development pathways	Raise awareness about support provided by GCF, Adaptation Fund, etc. for private sector to access its resources	CCCI Private Sector CSOs	•	•	•	1. # of CSOs, private entities that have benefitted from climate change financing 2. # of projects in private sector, CSOs
	Raise awareness about co-financing opportunities at different levels		•	•	•	1. # of approved projects 2. # of co-financers and sources
2.6 Strengthen knowledge management mechanisms to enable key stakeholders to access, manage and exchange information	Strengthen the Climate Change and Disaster Risk Reduction Platform to align and coordinate implementation of the Country Programme and Coordination Framework	CCCI Relevant Stakeholders	•			# of stakeholder meetings
Step 3: Technical Capacity of Stakeholders						
3.1 Strengthen knowledge generation, management and sharing amongst stakeholders	Building the institutional and technical capacity on monitoring, verification and reporting	CCCI MFEM (DCD)	•	•	•	1. M&E framework 2. M&E report
	Capturing lessons learnt, success stories, impacts etc.	CCCI MFEM (DCD)	•	•	•	# of newsletters, brochures, pamphlets, etc. disseminated
	Training of project implementers on capturing measuring, analysis and reporting data	CCCI MFEM (DCD)	•	•	•	# of trainings undertaken
3.2 Strengthen the capacity of stakeholders to mobilise, engage, collaborate with key players and create partnerships	Sensitise the stakeholders on the Climate Change Policy and Country Programme	CCCI MFEM (DCD)	•	•	•	# of partnerships and collaborations
3.3 Build the capacity of staff in national Accredited Entities and Executing Entities to develop bankable climate change project proposals	Establish a Technical Assistance Team to guide proponents	CCCI MFEM (DCD)		•	•	Technical Assistance team established under CCCI

3.4 Strengthen private sector capacity to support the implementation of the Climate Policy, Investment Strategy and GCF Country Program	Provide support to the private sector on development of climate change project proposals and concept notes	CCCI MFEM (DCD)	•	•	•	<ol style="list-style-type: none"> 1. # of proposals approved 2. Co-financing mobilized 3. # of projects implemented
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Conclusion

To effectively monitor and evaluate implementation of the Country Programme, the Cook Islands will develop an M & E Framework. The framework will emphasise on regular monitoring and periodic in-depth evaluation to ensure that expected outputs, outcomes and impacts are achieved. The NDA – Climate Change Cook Islands will drive the monitoring and evaluation of the Country Programme. The Country Programme will be reviewed periodically to take on board new and emerging issues related to climate change and its impacts on the Cook Islands.

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