# National Determined Contributions and the Pacific Island States

Presentation for Pacific Regional LCIP Platform Dialogue
October 18, 2023

Sala Dr George Carter Australian National University

george.carter@anu.edu.au

## The year 2015 – Negotiating a New Regime

Pacific states and the Pacific region leadership by example – amidst the debates for a new UNFCCC protocol on Commitments vs Contributions debate. Linking climate ambition and sustainable development

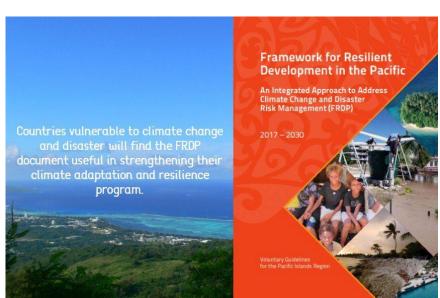
Global: UNFCCC Paris COP21 – Intentional NDC (the hook for 1.5 degree Long Temperature Goal, and loss and damage)

- Ad hoc Durban Platform 2012-2015

Regional: Pacific region – Framework for Resilient Development Pacific 2017-2030

- Goal 2: Low Carbon Development
- FRDP finalised 2017





## Nationally Determined Contributions

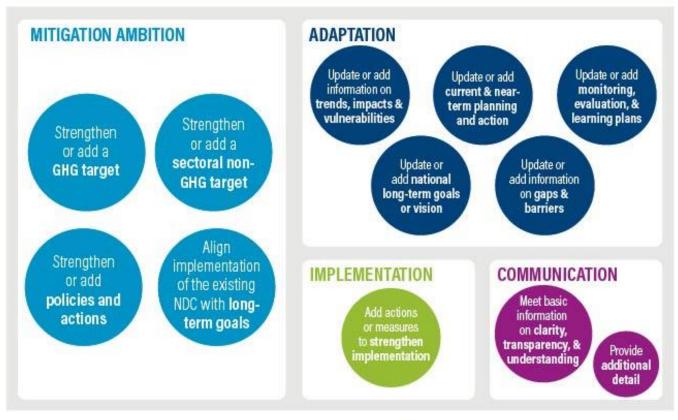
The Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) represents a collective effort to limit the rise in global temperatures to 1.5 degrees °C, above which the world will face increasing challenges to sustainable development.

Under the Paris Agreement, all parties have committed to developing climate targets - Nationally Determined Contributions (NDCs) outlining countries' goals to mitigate and adapt to climate change.

Countries commit to **updating these targets every 5 years** to ensure continued efforts towards limiting the rise in global temperatures to 1.5 degrees °C.

**Tracker – Pledges – Global Stocktake** 

Menu of Options for Enhancing Nationally Determined Contributions



#### Pacific NDCs and Enhance NDCs

- Despite their negligible contribution to climate change, Pacific Island Countries are working hard to implement their Nationally Determined Contributions and achieve their climate ambition.
- By 2015 <u>all 14 Pacific states</u> submitted Intended Nationally Determined Contributions (commitment to Paris) – by April 2016 became first NDCs
- As of 2023 all 14 Pacific states have updated or submitted Enhanced NDCs
- Moreover, 4 Pacific states have submitted second NDC (Tonga, Samoa, PNG, Marshall Islands



## Regional NDC Hub

- Formed by Pacific Island nations, for Pacific Islands nations, 'the Hub' helps find the data, resources, and expertise that is needed to implement their climate targets the 'Nationally Determined Contributions (NDCs) set by the Paris Agreement. The Paris Agreement represents a collective effort to limit the rise of global temperatures to 1.5 degrees celsius.
- During the first Climate Action Pacific Partnership (CAPP) Conference in 2017, leaders of Pacific Island Governments and stakeholders from across the region called for a mechanism to support Pacific Island Countries (PICs) Nationally Determined Contributions (NDCs).
- The idea received further endorsement at the 2017 Pre-COP in Denarau, Fiji.
- The same year, COP23 President and Hon. Prime Minister of Fiji, Frank Bainimarama officially launched the Regional Pacific NDC Hub (NDC Hub) during the twenty-third session of the Conference of the Parties (COP23) in Bonn, Germany.



https://youtu.be/\_uKrM6kWAuw

## NDC – Mitigation Pledges

- Cook Islands is committed to a future powered by renewable energy with targets of 50% of islands transformed from diesel based to renewable sourced electricity by 2015, to 100% coverage by 2020. Using 2006 as the base year, emission from electricity generation will be reduced by 38% by 2020.
- Fiji: "30% of BAU CO2 emissions from the energy sector by 2030. Absolute reduction as compared to reference year emissions. Of the 30% reduction of BAU baseline CO2 emissions, 10% will be achieved "unconditionally" using available resources in the country and 20% achieved "condition-ally"."
- Kiribati is a LDC SIDS with limited resources that will nonetheless commit to reduce emissions by 13.7% by 2025 and 12.8% by 2030 compared to a BAU projection.
- Marshall Islands: Economy-wide Target: GHG reduction of at least 45% below 2010 levels by 2030
- Federates States of Micronesia " · By 2030, increase access to electricity to 100% nationwide · By 2030, increase electricity generation from renewable energy to more than 70% of total generation · By 2030, reduce carbon dioxide emissions from electricity generation by more than 65% below 2000 levels · Meet Kigali Amendment HFC phase down commitments (in advance of schedule if possible) · By 2030, reduce black carbon and methane emissions related to diesel electric generation by more than 65% below 2000 levels"
- Nauru "Energy security: Increased access to cleaner and affordable energy Reduced greenhouse gas emissions Reduced dependency on fossil-fuel intensive technology and transport Reduced risk to energy supply chain disruptions"
  - Emissions will be reduced by **50 per cent below gross 2005 levels by 2030**, which corresponds to a 41 per cent r reduction when managed using a multi-year emissions budget.
- "Indicative targets: 22% energy sector emissions reductions below 2005 levels by 2025 45% Renewable Energy target by 2025 35% Energy Efficiency target by 2025"

## NDC – Mitigation Pledges

- PNG is committing to a headline target of carbon neutrality within the energy industries sub-sector. This will be achieved by:(....)- Enhancing levels of renewables in the energy mix through increasing from30% (2015) to 78% the level of installed capacity for on grid electricity generation that is produced by renewables.- Establishing a framework for fossil fuel emission offsetting: PNG remainscommitted to an energy transition but also recognizes that a full transition will take time given PNG's complex geographies and dispersed population as well as growing economy. As such a framework for offsetting of emissions from fossil fuels will be introduced to support economic incentives for the transition while also helping to finance domestic nature based solutions in particular reduced emissions and enhanced removals from the forest sector. sector"
- Palau Overall GHG emissions reduction of 26 percent in 2030 compared to 2007 levels (or 91 Gg CO2e compared to the new reference year once Samoa's GHG emissions inventory has been updated).
- Solomon Islands y 14% by 2025 below 2015 and by 33% below 2015 by 2030 compared to a business-as-usual projection. If and when Paris Agreement addresses international assistance to access financial and technical resources, Solomon Islands can, with international assistance, contribute: a further 27% reduction in GHG emissions by 2025, and a further 45% reduction in GHG emissions by 2030, compared to BaUprojection. With appropriate international assistance, Solomon Islands can achieve netzero emissions by 2050."
- Samoa "Energy: 13% (16 Gg) reduction in GHG emissions by 2030 compared to 2006, AFOLU: non-emission targets of establishing a forest inventory asprerequisite to identify a GHG emission target for the 2025 NDC and planting one million trees by 2023, Waste: non-emission target of expanding the formal waste collection system as prerequisite to identify a GHG emission target for the 2025 NDC."
- Tuvalu commits to reduction of emissions of green-house gases from the electricity generation (power) sector, by 100%, ie almost zero emissions by 2025. Tuvalu's indicative quantified economy-wide target for a reduction in total emissions of GHGs from the entire energy sector to 60% below 2010 levels by 2025.

#### **Broadening** Sectoral Coverage

Pacific Island Countries are working hard to include as many sectors as possible in their enhanced NDCs.



All updated NDCs

include tangible targets in the energy sector, and mention efforts in the transport sector. In some countries, this includes electricity generation.



4 updated
NDCs include
concrete
actions in the
Agriculture,
Forestry, and
Other Land
Use (AFOLU)
sector.



7 updated NDCs include the Waste sector.



Loss and
Damage,
Nature Based
Solutions
and Oceans
are included in
some updated
NDCs.

## NDC – Adaptation Pledges

- "adopt Climate Smart Agriculture practices, with emphasis on the promotion of sustainable practices in crop management, livestock and sugarcane farming and fisheries. To enhance resilience by upgrading, repairing and relocating new and existing critical public infrastruc-ture. Develop simplified and standardised early warning and monitoring systems, and prioritise nature-based solutions to mitigate the impact of flooding and cy-clones. Relocate highly vulnerable communities, and implement the concept of 'build back better'.
   Build strong healthcare system by implement-ing the 'Guidelines for climate-resilient and environmentally sustainable health care facilities in Fiji'. To conserve natural environment and biodi-versity wealth enabling sustainable long-term provision of ecosystem services, including carbon sequestration po-tential. To plant 30 million trees by 2035. To establish 30% of our Exclusive Economic Zones (EEZ) as Marine Protected Areas and work to-wards 100% management of our EEZ by 2030 through the implementation of the National Ocean Policy."
- "• Increasing water and food security with integrated and sector-specific approaches and promoting healthy and resilient ecosystems; • Strengthening health-service delivery to address climate change impacts; • Promoting sound and reliable infrastructure development and land management; • Increasing effectiveness and efficiency of early warnings and disaster and emergency management; • Enhancing the participation and resilience of vulnerable groups"
- "• By 2030, provide universal access to clean drinking water through refurbishment of existing water infrastructure and extension of network to unserved and underserved areas By 2030, effectively manage 50% of marine resources and 30% of terrestrial resources, including restricting commercial fishing in up to 30% of the FSM marine environment By 2030, climate-proof all major island ring roads, airport access roads, and arterial roads By 2030, establish a surveillance system, including a laboratory facility, to detect and monitor VBD, WBD, and FBD to enable rapid response and control of outbreaks By 2025, complete an update of the National Disaster Response Plan" To

## NDC – Adaptation Pledges

- "Adaptation: Infrastructure with increased resilience to climate change impacts and natural disasters Increased economic resilience and diversification Increased ability to invest in other sustainable development and climatepriorities"
- "• 100% of PNG's population to benefit from introduced health measures to respond to malaria and other climate-sensitive diseases; 6 million people (70% of population) benefit from improved early warning information to respond to climate extremes; 10% of the total population (0.8 million beneficiaries (25% are women) have increased resilience of food and water security, health, and well-being in PNG; and US\$ 1.7 billion value of transport, building and utility infrastructure and assets is built and or rehabilitated according to climateresilient codes and standards."
- "Building climate resilience, disaster risk reduction as well as adaptation projects in vulnerable sectors require significant external assistance and this has been highlighted through the prioritisation of climate change in national planning."
- "Adaptation knowledge sharing, coordination and collaboration among Ministries, NGOs, private sector, faithbased organisations and development partners is lacking. Development of knowledge and skills to address capacity gaps relating to climate change adaptation and disaster risk reduction. Cost \$126,6560,000 for adaptation (NAPA, National Communication Process). Community based vulnerability mapping, adaptation planning and management approaches to communitybasedadaptation projects on a whole of island basis. Establishment of institutional structures and strengthen capacities at the community level to support countrywide implementation of community-based vulnerability mapping and adaptation planning. Setting aside value added tax charged for fuel. Charging carbon levies, Charging fees for climate change research in the country. Funding of national climate change trust fund for priority climate change measures. Assistance from GCF Readiness programme to establish the necessary legal, institutional and fiduciarymanagement framework and accredit the national implementing entity. Improving donor coordination on climate change adaptation and mitigation programming and improved coordination between relevant government agencies. Effective implementation is conditional on and will depend on accessibility, availability and timely provision offinancial resources, technology and capacity building support. Intent of the government to increase use of RETs, improving energy security and reducing GHG emissions. The main focus still remains achieving adequate adaption to climate change and sustainable development goals."
- "• 30% of land in Tonga utilized for agro-forestry or forestry by 2025, Prevent any permanent loss of land to rising sea levels on Tonga's fourmain islands (i.e. Tongatapu, Ha'apai, Vava'u, and 'Eua), • Maintenance of the existing stocks of fish and other marine species."

#### **NDC** Implementation Roadmaps

#### 11 NDC Implementation Roadmaps

have been developed by **Pacific Island Countries.** 

#### 4 NDC Implementation Roadmaps

in Kiribati, Tuvalu, Samoa & Tonga have been supported by the **Regional Pacific NDC Hub.** 



NDC implementation roadmaps outline clear plans for how Pacific Island Countries' ambitious NDC targets can be achieved, helping governments **prioritize which steps to take,** and **attract the financing needed** to realize these actions.

### NDC – Quantified Financial Needs

- **Fiji**: this NDC update recognises that the cost of implementing this target currently stands at **US\$ 2.97 billion** between 2017 -20301. This is an exorbitant financial challenge compounded by competing adaptation and disaster risk challenges the country faces, all of which are exacerbated by the COVID19 economic crisis.
- **Kiribati:** "The Kiribati Joint Implementation Plan on Climate Change and Disaster Risk Management(KJIP) (2014) reports that the overall gross indicative resource costs to implement the KJIP over the period 2013–2023 are estimated to **be AUD 103,107,161** (approximately US\$75 million). Of this total, it is estimated that financial cost constitutes 96% of overall costs while the in-kind contributions constitute 4%."
- FSM "Energy efficieicny: The FSM National Energy Master Plans estimate an approximate cost of USD 296 million toimplement the plans over a 20-year period, plus an added cost of approximately 5% of the totalbudget to provide additional capacity building and technical assistance—e.g., for coordinating andmonitoring implementation—over the course of the projects."
- Palau "Based on a first-order estimate, the upfront investment cost for the renewable energy and energy efficiency measures in Palau's INDC would be on the order of \$5.5 million USD. "
- **Tuvalu** "The initial capital cost of solar arrays, wind turbines and batteries to replace the current energy demand is estimated to be A\$52 million. Savings in diesel fuel over the 30 year life of the overall programme are estimated to be A\$152 million (2011 dollars). (...) After allowing for battery replacements and other maintenance, which are estimated to cost A\$115 million, the net saving over the 30 year programme will be A\$37 million. "

#### NDC Investment Plans & Project Pipelines



#### **10** NDC Investment Plans

have been developed by **Pacific Island Countries.** 



#### **5** NDC Investment Plans

in Kiribati, Tuvalu, Samoa, Fiji and Tonga have been supported by the **Regional Pacific NDC Hub.** 



NDC investment plans and project pipelines outline bankable mitigation and adaptation projects which can support countries in reducing greenhouse gas emissions, adapting to climate change, and attracting the finance needed to achieve their NDC targets.

#### NDC – Market Mechanisms

- **Fiji** recognises the role of international market-based cooperation in facilitating, expediting and enhancing technology development and transfer, capacity building and access to financial resources to support low carbon and climate resilient efforts. Fiji will explore the potential of bilateral, regional and multilateral market-based cooperation, including in the context of Article 6 of the Paris Agreement to support the achievement of its own NDC and to provide additional mitigation outcomes to support NDC attainment by other countries.
- Kiribati will consider market based mechanisms to support establishment and operation of a National Climate Change Trust Fund.
- Marshall Islands is proud to support efforts for ambitious decarbonization action in the International Maritime Organization (IMO), including through the introduction of a market-based measure to put a price on carbon."
- Palau Intention to use market-based mechanisms to meet target: no
- Papua New Guineea Implementing the proposed actions could deliver significant emissions reductions that could be monetised through results based payments under a range of mechanisms including the Green Climate Fund, bilateral, market or non-market mechanisms under Article 6 of the Paris Agreement and PNG is looking forward to enforcement of the Article 6 on the ground.
- **Samoa** intends to achieve the mitigation targets stated in its Second NDC through domestic efforts and actions, and it does not intend to use internationally traded credits to meet these targets. However, Samoa is interested in selling carbon credits to more developed countries that may be interested.
- Solomon Islands intends to use the market and non-market mechanisms under Article 6 of the Paris Agreement.
- **Tonga** intends to achieve the mitigation objectives under its 2020 NDC exclusively through domestic efforts and does not envision any internationally transferred mitigation outcomes.
- Tuvalu Intention to use market based mechanisms to meet commitments: no

# Measurement, Reporting & Verification Systems

-----

11 Pacific Island
Countries are developing
Measurement, Reporting
and Verification (MRV)
systems.





6 MRV systems in the Marshall Islands, Tonga, Cook Islands, Federated States of Micronesia, Solomon Islands and Fiji have been supported by the Regional Pacific NDC Hub. MRV systems help countries collect data on their emissions reductions, and communicate progress towards fulfilling their NDC targets to the UNFCCC.



## Long-Term Low Emission Development Strategies

Under the Paris Agreement, countries develop long-term low greenhouse gas emission development strategies (LT-LEDS), outlining their **long-term efforts towards reducing national emissions.** 



Energy & Transport



Agriculture, Forestry and Other Land Use (AFOLU)



Industrial Processes and Product Use (IPPU)



Waste

**10** Pacific Island Countries have expressed their intention to develop these plans.

3 Pacific Island
Countries have
submitted LT-LEDS
to the UNFCCC.

The Regional
Pacific NDC Hub
is supporting the
Solomon Islands to
develop their LT-LEDS.





#### For Discussion

- What are the experience of local community and indigenous peoples participation in NDC planning, implementation and delivery?
- Are local community and indigenous peoples needs, and solutions to climate action being reflected?
- What are targets or climate action priorities that can be incorporated or need to be safeguarded - into the political language that would come out of COP28 Global Stocktake?