

*Promoting CDM in Pacific Island
Countries- Experiences and lessons
from UNEP
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Background of Carbon Trading in Fiji

- | Date of ratification Kyoto Protocol: 17 September 1998
- | Designated National Authority (DNA) established: 2002
- | Cabinet endorsed establishment of Carbon Trading Technical Team (CTTT): 2008
- | Formulation of Fiji's CDM Policy Guideline - 2009 to April 2010
- | Establishment of the ClimateChange Unit under Ministry of Foreign Affairs 2011



UNFCCC Related Works:

- Fiji Initial National Communication to the UNFCCC -18th May 2006
- Fiji Second National Communication – ready by end of November 2012.



Potential CDM Projects at PIN stage

Qaliwana Hydropower Project: This project aims to ensure that the people of Fiji attain affordable, stable and secure source of energy for the future economic growth and prosperity of Fiji; 18MW hydropower scheme; estimated annual emission reductions 19, 717 tCO₂e.

Methane Capture and Flaring at Naboro Landfill: This project aims to reduce methane emissions to the atmosphere through landfill gas (LFG) recovery and flaring; estimated annual emission reductions of approximately 15,000tCO₂e; project activity meets the criteria of additionality for micro scale project activity.

Potential CDM Projects at PIN stage

- **Fiji Tourism Energy Efficiency Investment Project:** This project aims to work with the tourism sector to identify solutions to increase energy efficiency in hotels and resorts and reduce impacts on the environment; estimated annual emission reductions of 4,847 tCO₂e; project activity meets the criteria of additionality for micro scale project activity.





PoAs at PIN stage in Fiji

- **Biogas Cogeneration PoA in Fiji:** The proposed PoA will contribute to reduction of methane emissions from untreated household and agricultural and livestock waste; plan to install 5 to 10 new projects; the estimated annual emission reductions from the first CPA is 500 tCO_{2e}; the project additionality shall be demonstrated by carrying out barrier analysis.
- **Sewerage Treatment PoA in Fiji:** The proposed PoA will reduce GHG emissions (methane in particular) in an economically sustainable manner. This will also result in other environment co-benefits such as improved digested sludge quality and reduced odour; estimated annual emission reductions from the first CPA is 16,625tCO_{2e}; project activity meets the criteria of additionality for micro scale project activity.

PoAs at PIN stage in Fiji

- i **National Grid-connected Hydropower PoA in Fiji:** The proposed PoA will contribute to reduction of CO₂ emissions avoiding usage of diesel for equivalent electricity generation; the estimated annual emission reductions from the first CPA is 57, 564 tCO_{2e}; the project additionality shall be demonstrated by carrying out investment analysis.
- i **Tropik Biomass Power Generation Project:** The proposed project activity will reduce CO₂ emissions through displacement of more carbon intensive fuel based electricity generation; project installed capacity is 9.3MW; estimated annual emissions reductions of 30,000 tCO_{2e}.

PoAs at PIN stage in Fiji

- **Plant Oil Power Generation for maritime communities:** To utilise the oil extracted from plentiful vegetable oil resources (mainly coconut oil and palm oil) in Fiji for electricity generation and transportation lowering the greenhouse gas emissions; estimated annual emissions reductions of 800 tCO_{2e}; project meets the criteria of additionality for micro scale project activity.
- **Lighting Energy Efficiency PoA in Fiji:** To use energy efficient lamps (Compact Fluorescent Lamps) to replace 100,000 incandescent Lamps used in residential lighting, commercial and street lighting in Fiji; estimated annual emission reductions of 6,000 tCO_{2e}; project activity meets criteria of additionality for micro scale project activity.



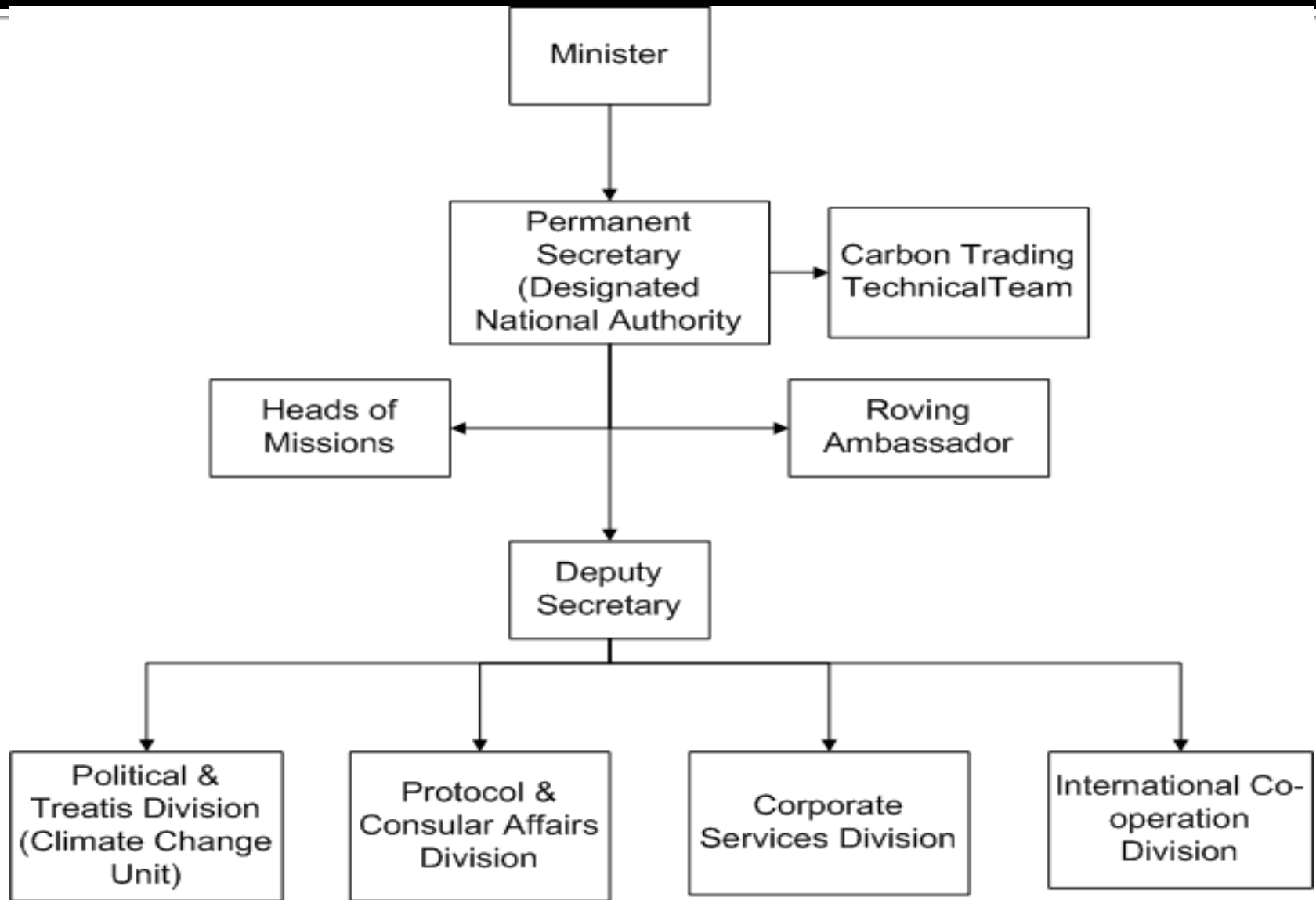
Existing CDM Projects

- **Vaturu and Wainikasou Hydro Projects (UNFCCC ID 89):** The Vaturu and Wainikasou projects are small-scale run-of-river hydro projects in Fiji implemented by Sustainable Energy Limited (SEL), a joint venture between the Fijian Electricity Authority (FEA) and a hydro project developer, Pacific Hydro Limited (PHL). Annual average CERs from the project activity is 57,564 tCO_{2e}/year.
- **Kinoya Sewerage Treatment Plant GHG Emission Reduction Project (UNFCCC ID 4552):** The Project activity is being developed by Water supply & Sewerage Department (WSD) under the Ministry of Works, Transport and Public Utilities, Government of Fiji Islands. Project activity involves introduction of methane recovery and combustion system to the existing and proposed anaerobic sludge treatment units (anaerobic digesters). Annual average CERs from the project activity is 22,471 tCO_{2e}/year.

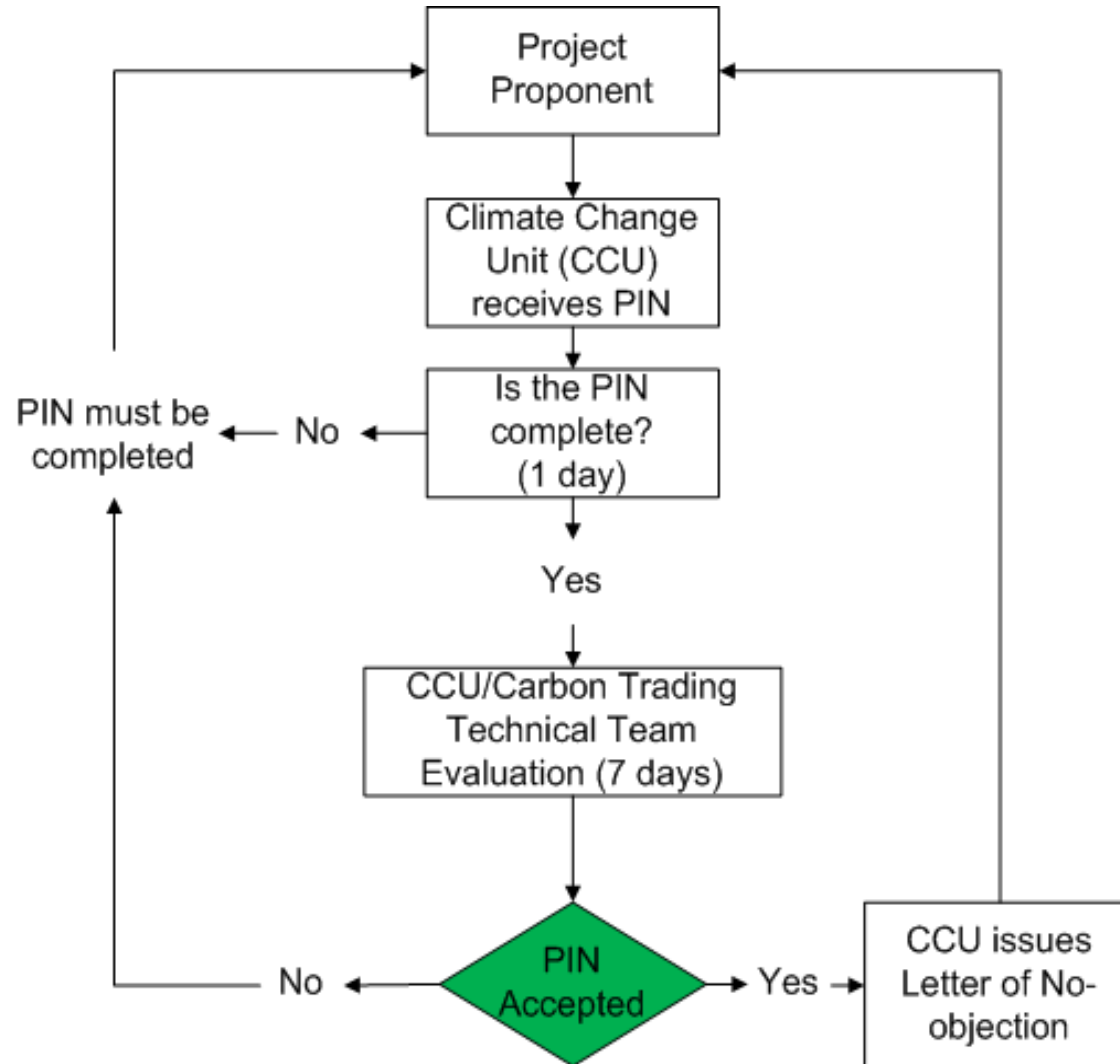
Fiji CDM Project under Validation

- **Nadarivatu Hydropower Project:** Nadarivatu Hydropower Project (called hereafter “the project activity”) is a 41.8MW run-of- river hydropower scheme located on Nadrau plateau in the interior of Viti Levu, the main Island of Fiji. This project will be constructed and operated by the Fiji Electricity Authority (FEA). Annual average CERs from the project activity is 51,459 tCO_{2e}/year.

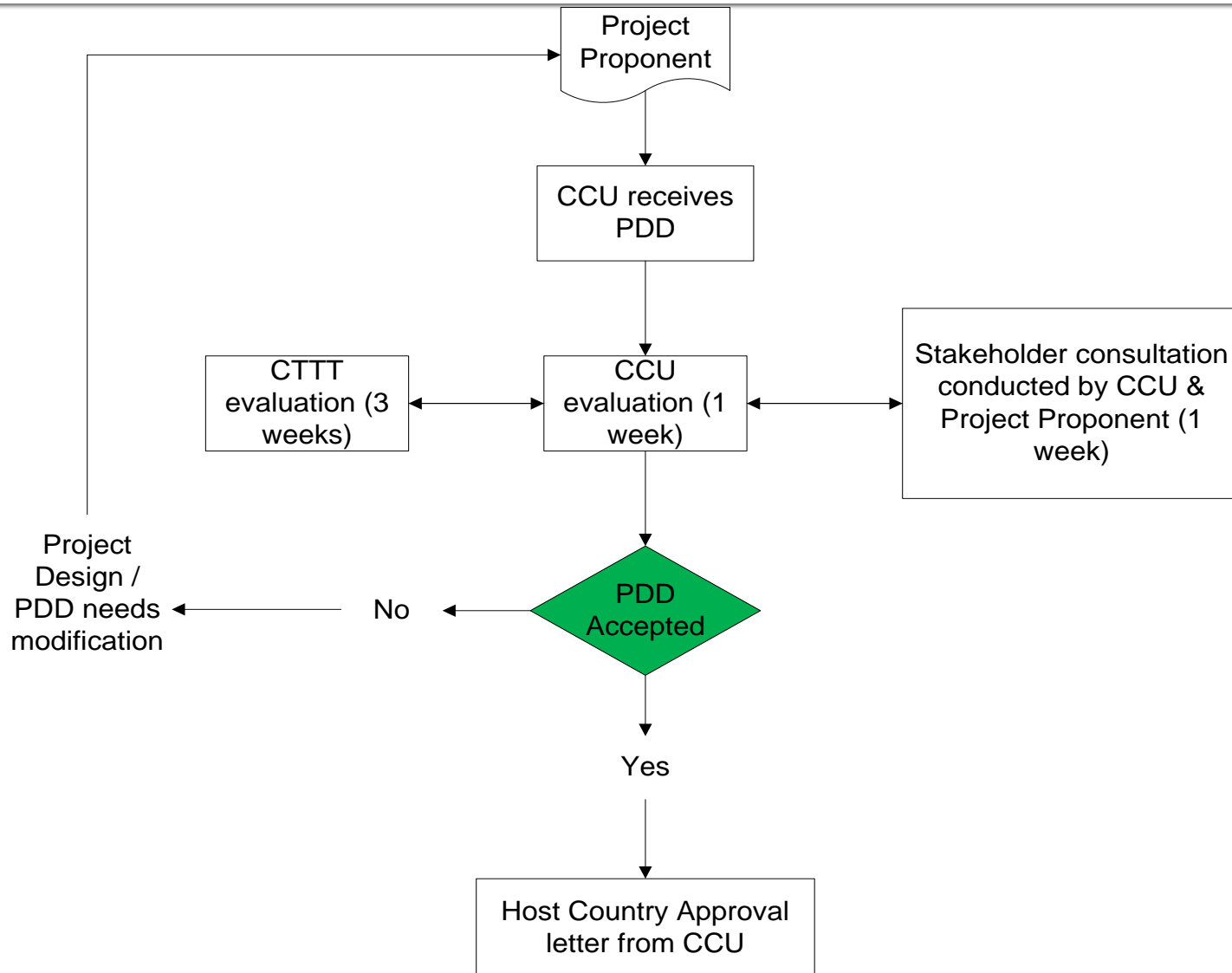
CDM Institutional Framework



Letter of No Objection



Letter of Approval Process



CHALLENGES

- Lack of local qualified CDM expertise (<10)
- CDM – new product in the market
- Consolidation of a centralized CDM database system (scattered data)
- Upfront Cost factor for project proponents (act of reluctance)
- CDM Unit under MoFA&ET

WAY FORWARD

- CDM unit to be a department of its own
- Support on CDM specialists - set up to be 12 months or more
- Ultimate target is to be able to stand firm on our own
- Participation of lending institutions like banks
- To register more CDM projects
- To venture into new CDM projects like SF6