



Introduction to Carbon Market

Inaugural National Carbon Market Strategy Roadmap Consultation Workshop

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The Major Concern

Rapid Industrial Growth

Increased energy consumption

Increased CO₂ and other GHG emissions

Global Warming due to increased concentration of GHG

'Put a Price on Carbon': consistent advice by economists

• 2018 Noble Prize Winner Economics Prof. W. Nordhaus



Birth of the Climate Convention

- UNFCCC
- Kyoto Protocol
- The Doha Amendment
- Paris Agreement



GHG should be stabilized within a time frame.



Reduction of GHG emission by Developed countries in the First Commitment Period (2008 -2012)



Extended the Kyoto Protocol to 2020



Limiting global warming to well below 2°C above pre-industrial levels, and pursuing efforts to limit the temperature increase to 1.5°C



DOHA 2012
UN CLIMATE CHANGE CONFERENCE
COP18 | CMP8



PARIS2015
CONFÉRENCE DES NATIONS UNIES
SUR LES CHANGEMENTS CLIMATIQUES
COP21 · CMP11



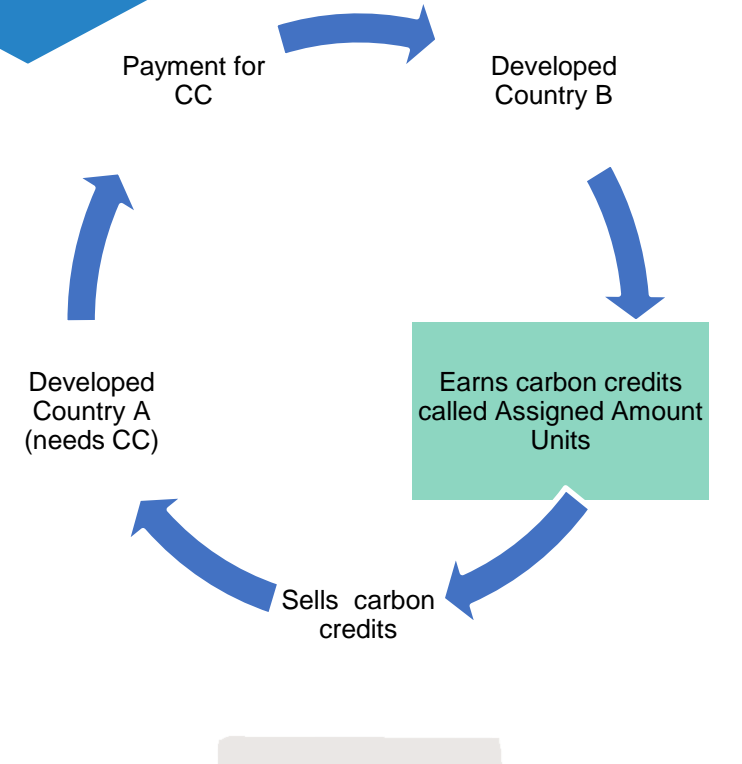
Why Carbon Trading? Optimises Cost Efficiency

Delivers a given reduction at lowest cost

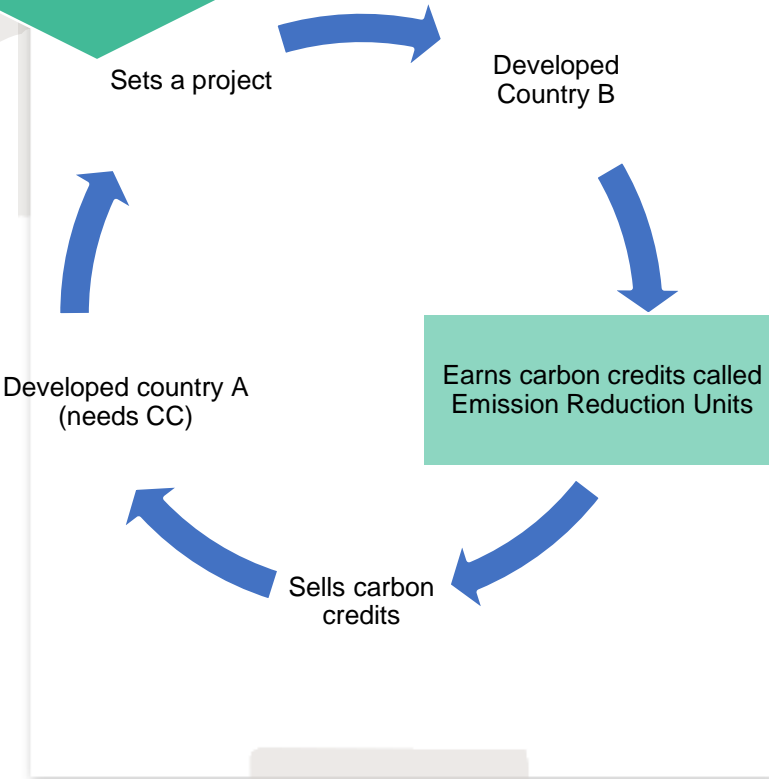
Decision to either “make or buy”

- Make investments to reduce emissions if they have a cheaper price than the allowance price
- Buy allowances from others in case it is more expensive to abate emissions

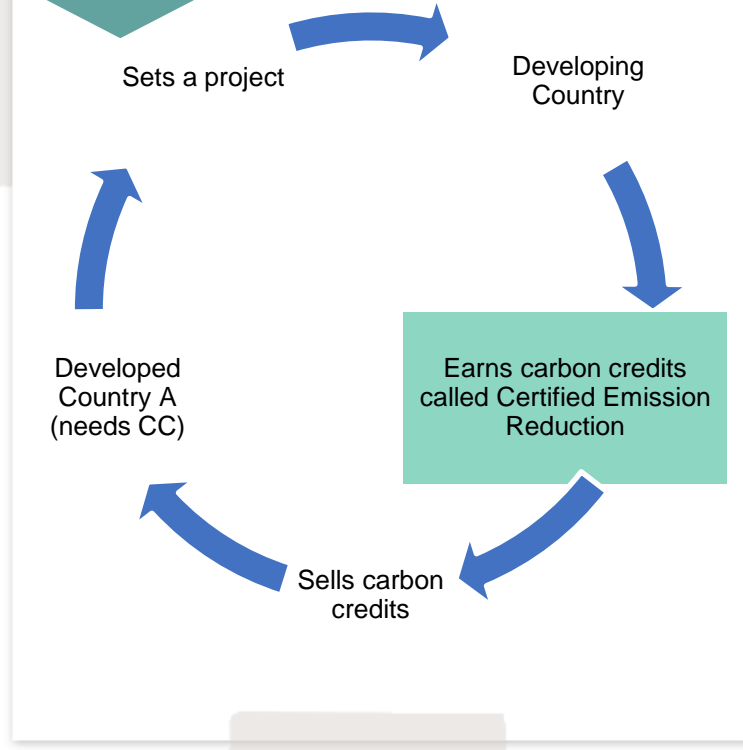
Emissions Trading



Joint Implementation



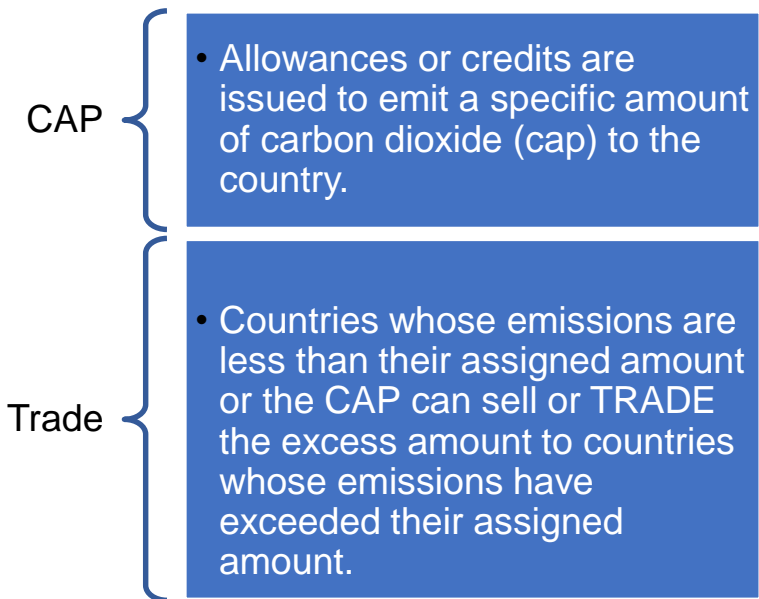
Clean Development Mechanism



Carbon Credits, Offsets and Markets



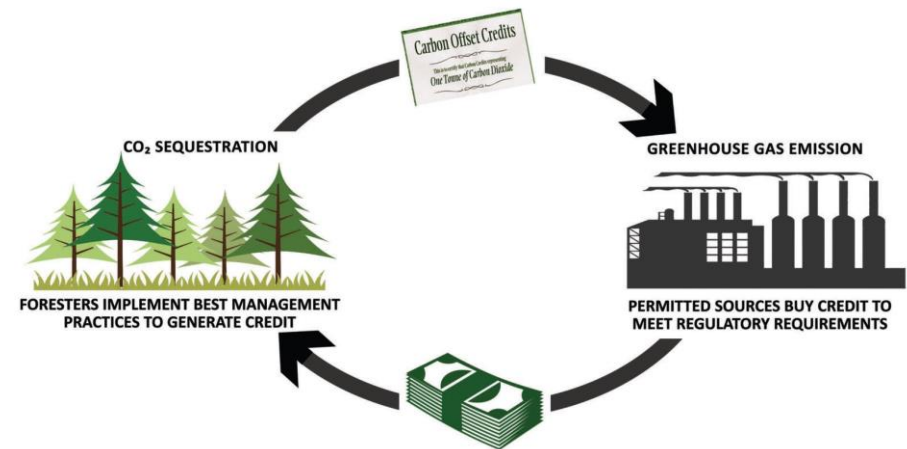
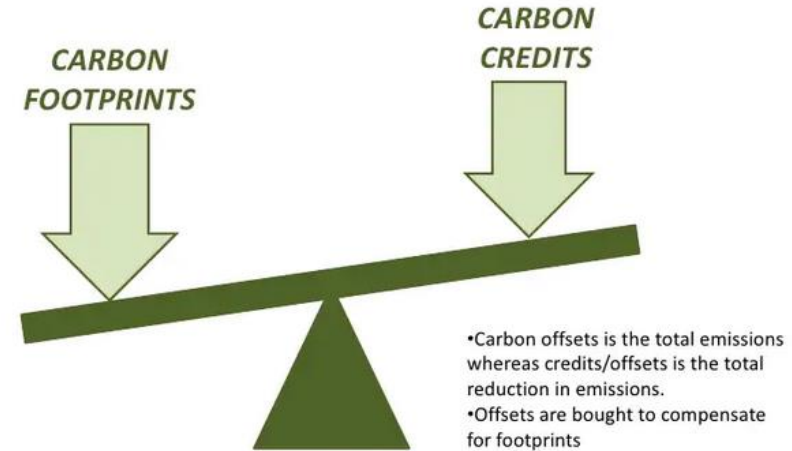
- Cap-Trade Program



- Carbon offsets are a voluntary market

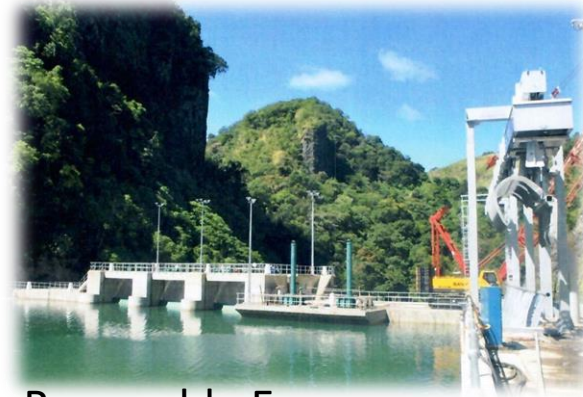
Carbon Offsetting

- Might not be possible to eliminate all emissions entirely.
- Therefore, offsetting is seen to compensate for those emissions by investing in projects that contribute to reducing emissions in other ways.
- Individuals, organizations, or governments seek to mitigate the negative impact of their carbon emissions on the environment.



Carbon Offset Projects can be grouped into 2 categories:

Avoidance / Reduction Projects



Renewable Energy



Methane Flaring

Removal/ Sequestration Projects



Reforestation



Mangrove planting

Key Players

Sellers

Implement conservation practices that sequester carbon or ER projects

Create carbon credits that are sold in the carbon markets

Buyers

Private companies, brokers, country governments

Project developers

Facilitate the transaction between buyers and sellers

Ensure quality of data collection and adherence to standards

Enrol in carbon credits/offset programs

Carbon Registries

Track projects

Establish verification standards

Issue credits for each unit of ER or removal i.e verified and certified

Record ownership of credits

Record when credits are applied/retired

Third-party verifiers

Validate that correct data collection protocols are followed

Certify carbon credits with the registry

Project managers /owners

Design and execute the project

Have legal title to sell the carbon credit

Select a third party standard to verify the credits

Manage the verification process

This could be the project owner, a consultant or a specialized services provider.

How to generate Carbon Credits?

- Energy production from renewables, wastes and low carbon intensive fuels
- Energy Efficiency measures like waste heat recovery
- Installation of energy efficient equipment
- Switch over to less GHG emitting production processes.
- Agriculture, Afforestation and Reforestation.



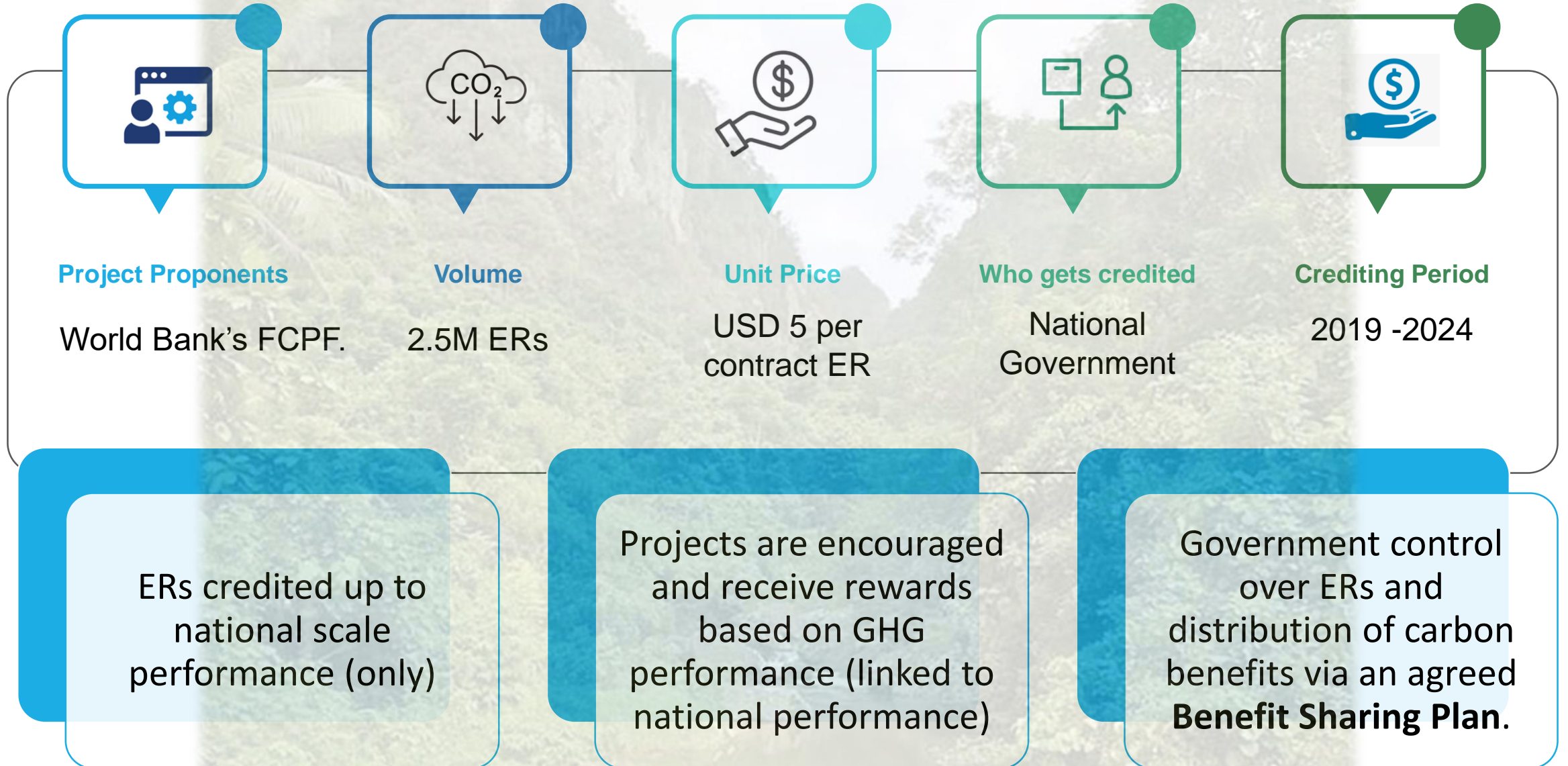
Investments in carbon
reduction projects

Fiji and Carbon Markets

- Fiji REDD+
- Kinoya-based Gas Flare Project
- Improved Cook Stove Programme for Fiji
- The Nakau Programme in Drawa



Fiji REDD+ Programme



Project Proponents

World Bank's FCPF.

Volume

2.5M ERs

Unit Price

USD 5 per contract ER

Who gets credited

National Government

Crediting Period

2019 -2024

ERs credited up to national scale performance (only)

Projects are encouraged and receive rewards based on GHG performance (linked to national performance)

Government control over ERs and distribution of carbon benefits via an agreed **Benefit Sharing Plan.**

Kinoya-based Gas Flare Project



Project Proponents

ADB



Volume

18,290 CERs



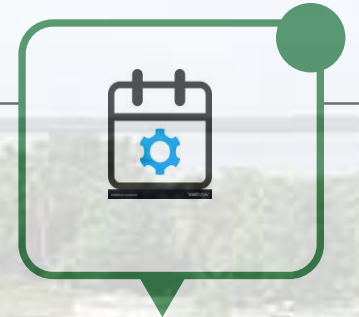
Unit Price

USD 8.20



Who gets credited

WAF



Crediting Period

2015-2020

The ADB supported the development of the Kinoya Sewerage Treatment Plant GHG Emission Reduction Project under ADB's loan Suva–Nausori Water Supply and Sewerage Development in the Republic of Fiji.

A total of 18,290 contract CERs were generated as registered on the CDM Registry in 2020. The contract CERs amounted to approximately USD 150,000.

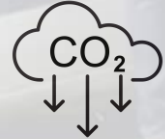
The project was successfully registered under UNFCCC, CDM

Improved Cook Stove Programme for Fiji



Project proponent

Korea Carbon Management Limited



Volume



Unit Price



Who gets credited



Crediting period

2019

Objective to disseminate 60,000 improved cooking stoves to rural and peri-urban households.

Kasabias Pte limited is the service provider and have distributed ICS to 1,193 communities across the 14 provinces.

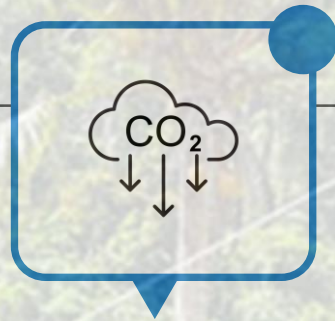
UNFCCC– CDM initiative that aims to accelerate sustainable energy access for women in rural communities

The Nakau Programme in Drawa



Project Proponent

Live and Learn
Environmental
Education



Volume

100,000 t of VERs



Unit Price



Who gets credited

8 Land owning units



Crediting Period

2012-2020

Project is focused on reducing emissions from deforestation and forest degradation, improving forest management, and enhancing the livelihoods of local communities.

The project is the first in Fiji to receive carbon credits under the Plan Vivo Standards. Project has successfully protected 4,120ha of forest.

The carbon credits are generated by measuring the carbon sequestration potential of the restored forest area and the avoided emissions from deforestation and forest degradation.



Vinaka, Thank you