



An overview of Papua New Guinea's readiness efforts towards the mitigating of its greenhouse gases

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Session I NAMAs, BURs and MRV: - Part 2: Lessons learned from country-based practical experience in NAMAs, BURs and MRV institutional arrangements in the Pacific region

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Presentation Outline

Objective

International Commitment

National Commitment

Policy

Activities

Lesson learned

Q&A



Objective

1

Share Papua New Guinea's readiness effort to reducing its greenhouse gases

2

Share lessons learned in the process

Background - Political

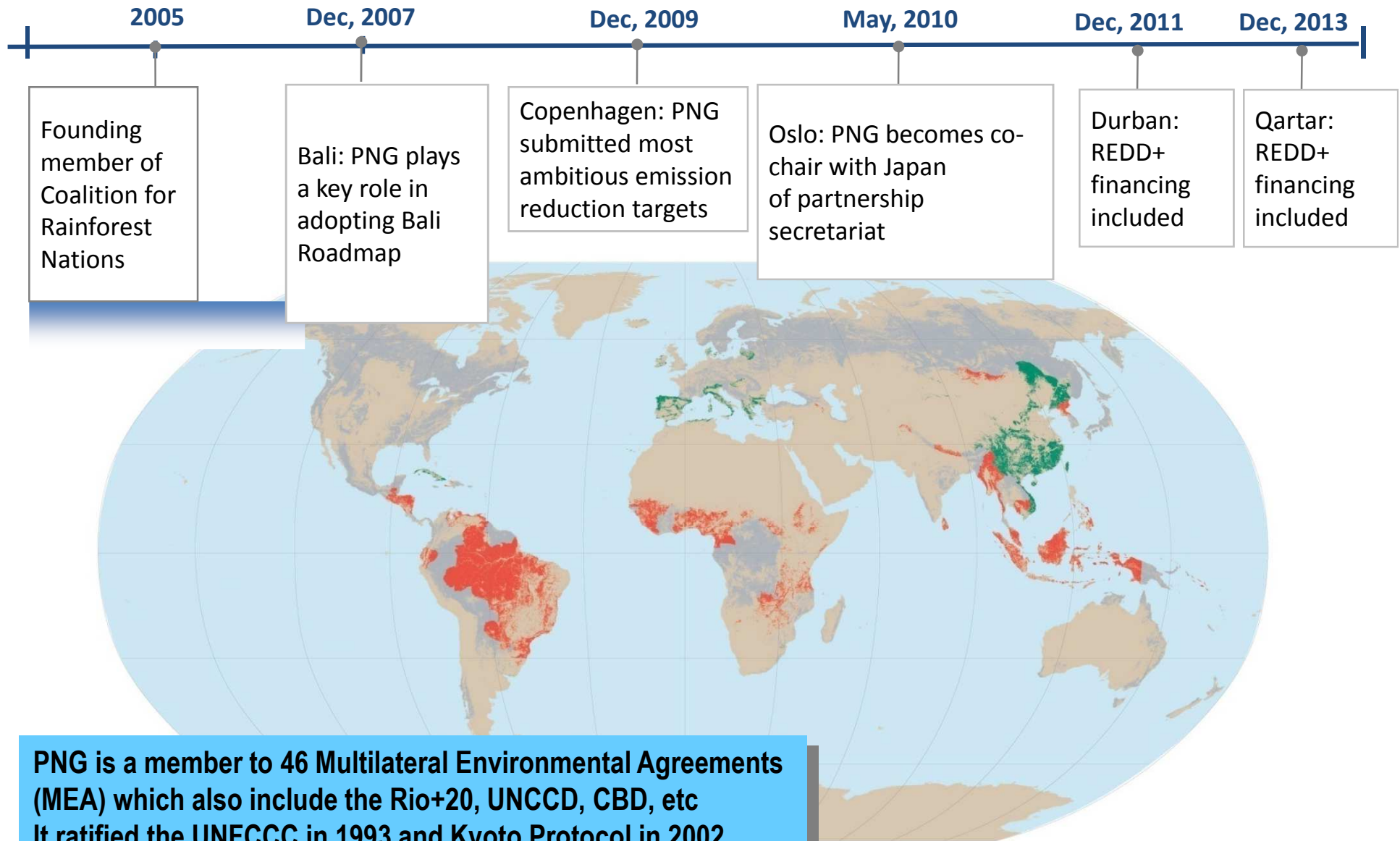
- ✔ Situated north of Australia, west of Solomon and East of Indonesia
- ✔ September 16, 1975 got its independence from Australia under Westminster arrangement
- ✔ Divided into four regions; Southern, Highlands, Momase, and New Guinea Islands
- ✔ The regions are sub-divided into 22 provinces
- ✔ >800 languages and cultural backgrounds
- ✔ Landownership is 97% customarily own while 3% held by government or privately held under 99 years lease back arrangement
- ✔ 7,059,653 people (2011 fig), 83% still live in rural areas
- ✔ Average growth rate of 3.2%



**What is GoPNG
doing?**

1 International Commitment

PNG is a global leader in pushing climate change negotiations forward



**PNG is a member to 46 Multilateral Environmental Agreements (MEA) which also include the Rio+20, UNCCD, CBD, etc
It ratified the UNFCCC in 1993 and Kyoto Protocol in 2002**

International climate change process is important

From the Kyoto Protocol ...

Environmental treaty

- Emission reductions focused on developed world (Annex 1 countries)
- No coverage of forestry and agriculture
- International funding limited to CDM/JI mechanism
- System based on compliance; reporting against obligations
- UNFCCC 80% of the game

... to the Copenhagen Accord

Economic transformation programme

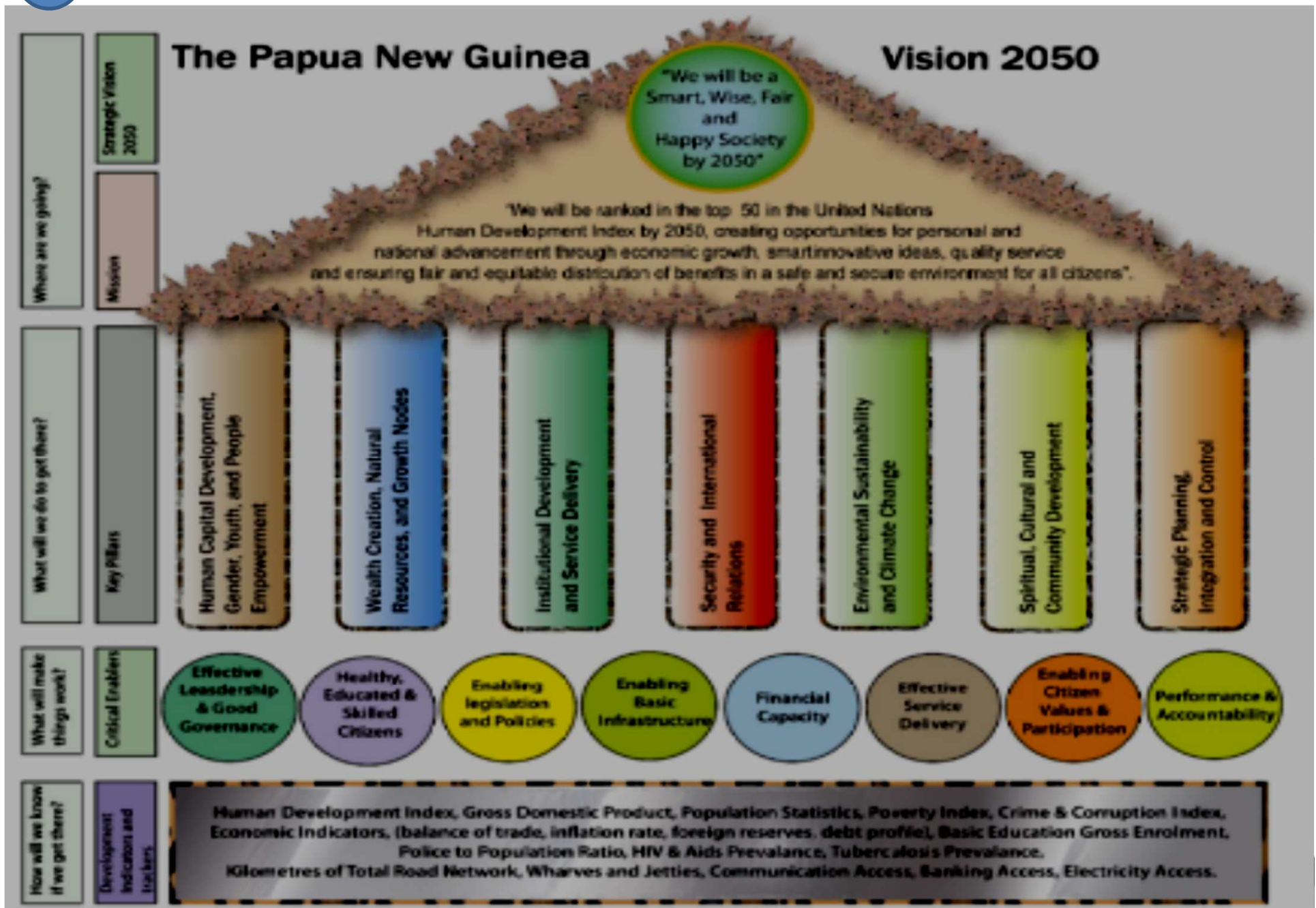
- Covers mitigation in all countries, i.e., both developed and developing world, while recognizing differentiated responsibility
- Covers all sectors, specifically recognizing forestry and land-use
- Provides \$30b in fast-start funding (2010–12); acknowledges need for \$100b financing by 2020
- System based on self-interested commitments within a framework for performance transparency
- UNFCCC 20% of the game

... and the Cancun Agreement

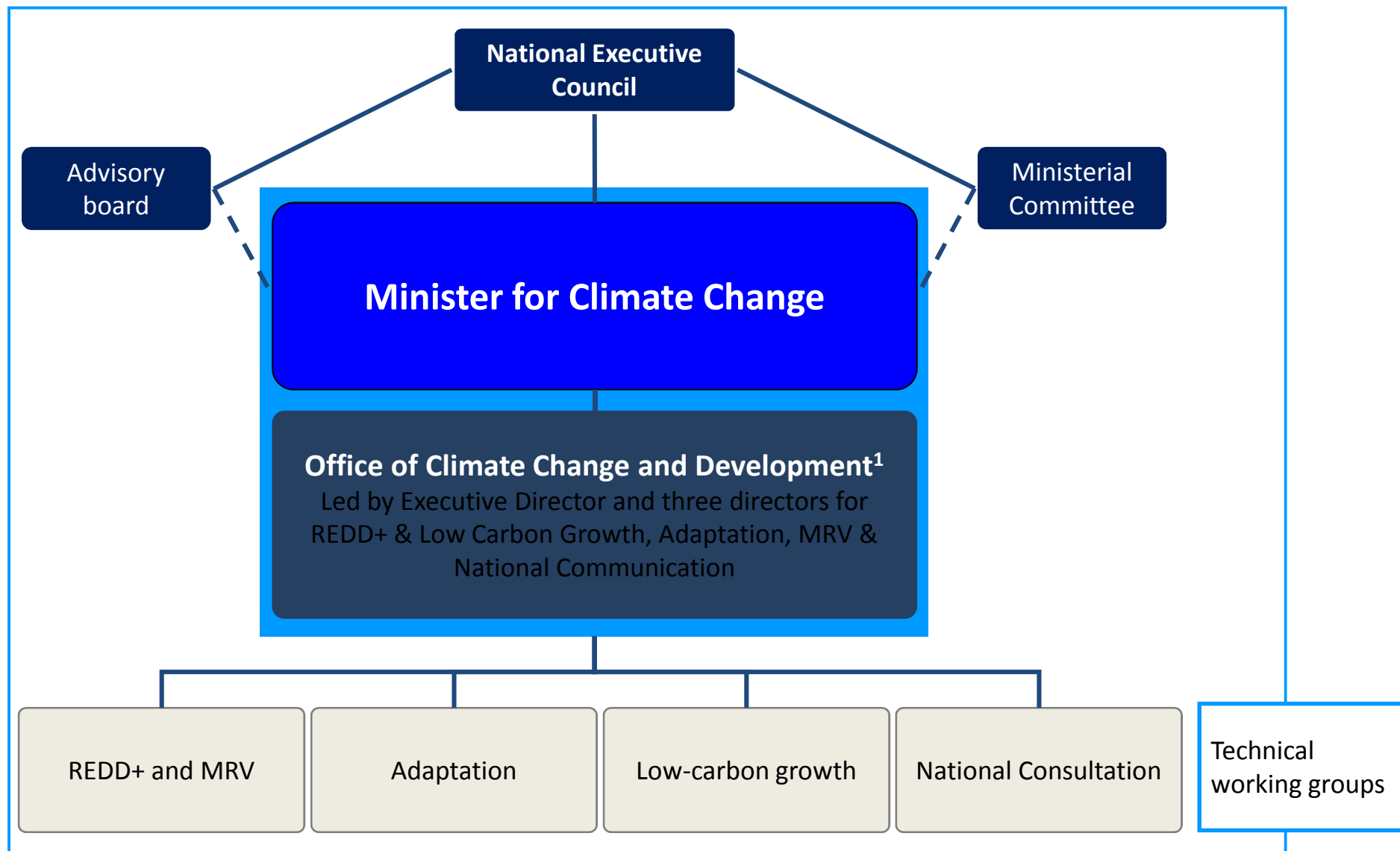
Translates the Copenhagen outcome into UNFCCC agreed documents, but adds

- Outline of an agreement for technology sharing
- A framework for implementing REDD+
- Details on the establishment of a Green Climate Fund

2 National Commitment



The OCCD's governance structure has been put in place

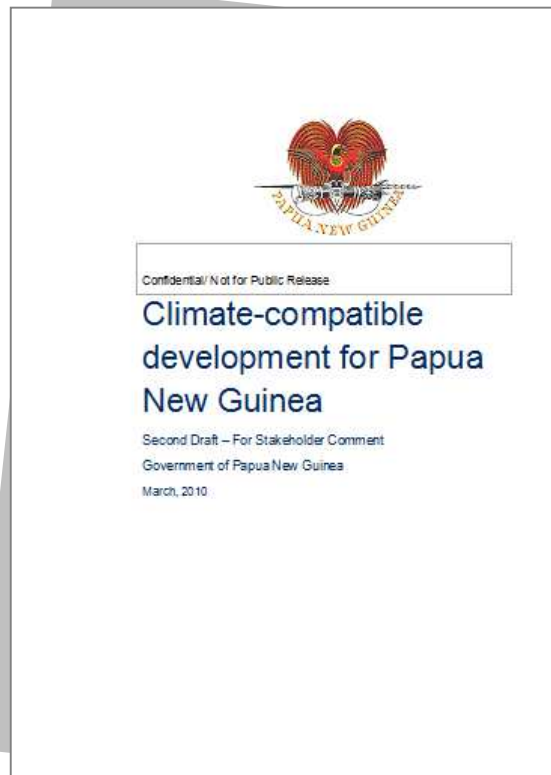


¹ OCCD Executive Director reporting directly to Prime Minister

SOURCE: NEC decision 54/2010, OCCD analysis

3

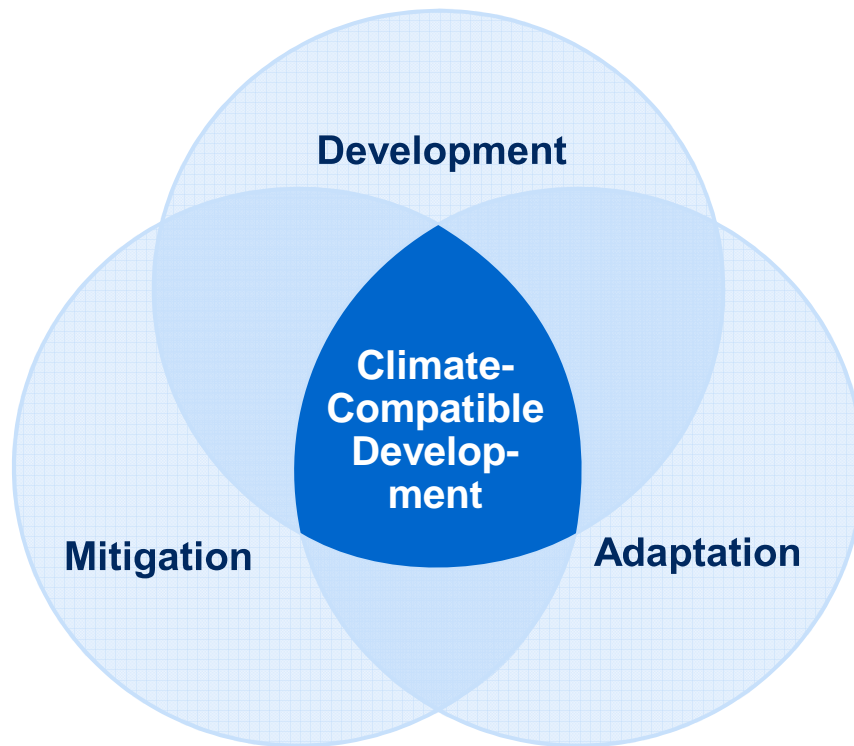
PNG's Climate-Compatible Development Strategy is an evolving document that describes economic development opportunities in alignment with Pillar 5 Vision 2050



- A reference document for PNG strategic framework of economic development, mitigation, and adaptation actions, which includes:
 - Environmentally-sustainable and low-carbon economic growth
 - Opportunities of reducing carbon emissions
 - Adaptation to climate-driven hazards
- CCDS will be improved with inputs from further stakeholder consultation, pilots and MRV learning

PNG's Climate-Compatible Development Strategy combines economic development with mitigation and adaptation

Strategic framework



Economic Development

- Achieve GDP per capita of USD 3,000 by 2030, as set out in our Vision 2050

Mitigation

- Potential to reduce emissions of greenhouse gases, by at least 50% by 2030 driven mainly by abatement measures in land use, land-use change and forestry
- Become carbon neutral by 2050, investing into low-carbon infrastructure today

Adaptation

- Reduce vulnerability to climate change-associated risks
 - Gradual hazards (e.g., disease)
 - Event-driven hazards (e.g., landslides, coastal flooding)

Clear mitigation and adaptation priorities have been identified

Pilots and programs



Adaptation

- Mangrove planting to protect coastal villages
- Coastal early flood warning system
- Coastal engineering
- Inland flood warning



REDD+

- Review of agriculture leases
- Locate palm plantation on non-forest land
- Afforestation/reforestation programs
- Secondary forest management
- Reduced impact logging
- Forest Conservation

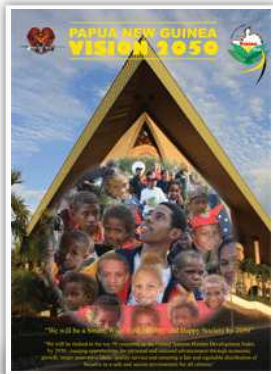


Low-carbon growth

- Renewable energy for Port Moresby
- Rural electrification via rehabilitation of existing and new micro hydro plants
- Energy efficiency measures
- Mitain capture in Palm Oil waste



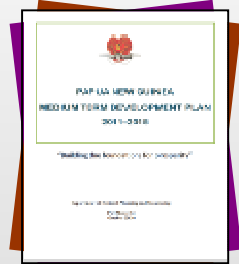
GoPNG through OCCD has translated our country's constitutional priorities and long-term development goals into tangible actions



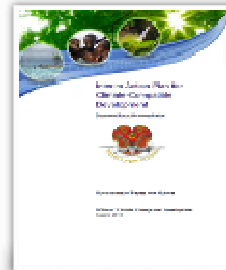
Vision 2050, Pillar 5: Environmental Sustainability and Climate Change



Development Strategic Plan, 2010-2050



Medium Term Development Plan, 2011-2015



CCDS & IAP

PNG's climate compatible development strategy (CCDS) has identified the country's mitigation and adaptation priorities, which have been translated into tangible actions in the Interim Action Plan (IAP)



OCCD Corporate Plan, 2011-2013



Annual Workplan, 2013

OCCD: Implementation Plan

NEC Decision, 54/2010

The journey so far has progressed significantly with different stakeholders

NOT EXHAUSTIVE

Nov 2009

March 2013

Development of PNG's reaction concept to climate change

Provincial/local consultation and pilot projects to inform about, test and refine concept

Government departments

- Department of Prime Minister
- Department of Environment and Conservation
- Department of Agriculture and Livestock



Department of Petroleum and Energy
papua new guinea

Development partners



NGOs and CBOs



The Nature Conservancy
Protecting nature. Preserving life.



CONSERVATION INTERNATIONAL



Provinces/landowners

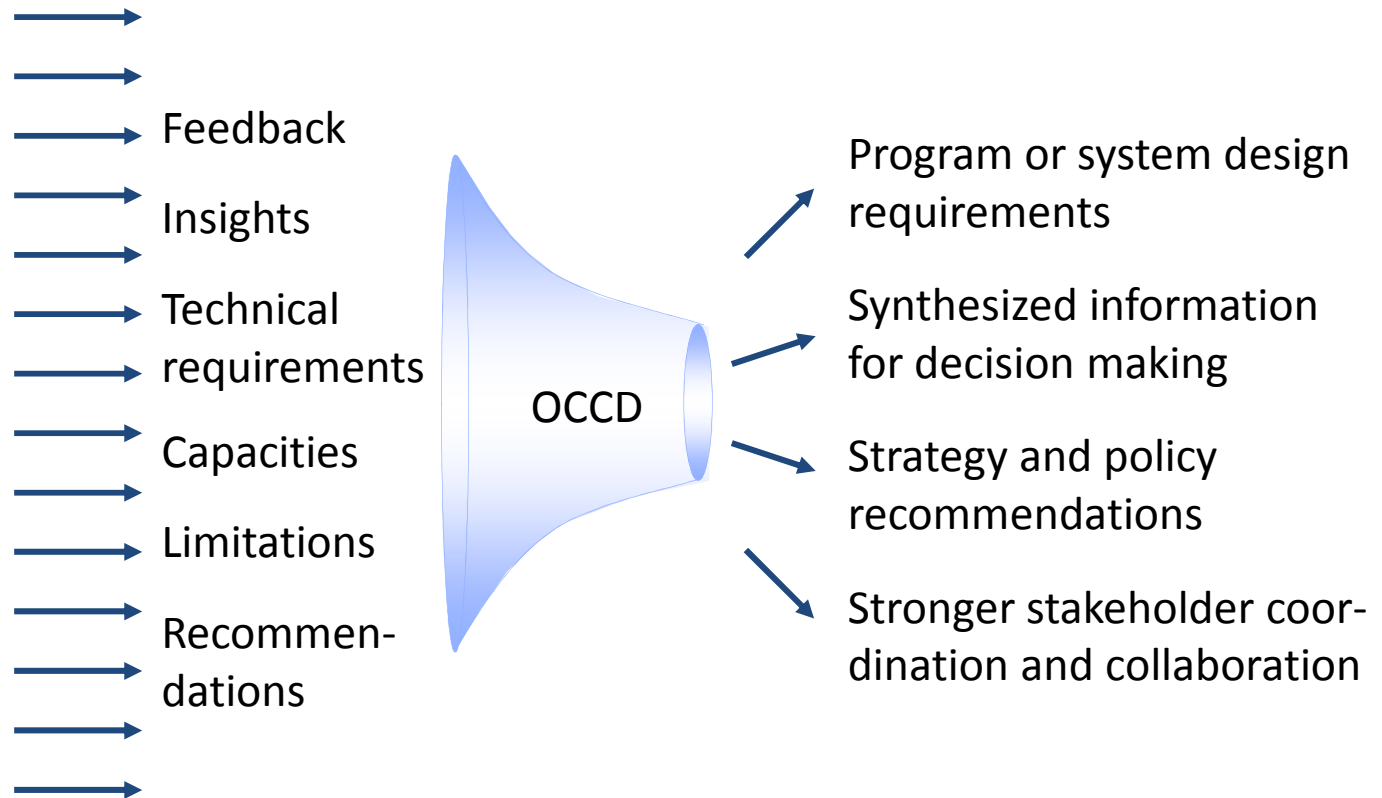


Civil society, esp. CBOs

Private companies, Research and Academic Institutions

... and is responsible for ensuring a whole-of-government approach to Climate Mitigation design and implementation

- Landowners
- PNGFA/JICA
- FRI
- DEC
- DAL
- DLPP
- Mapping Bureau
- Mineral Resources
- UPNG
- NARI
- DPE
- UNITECH
- Provincial government

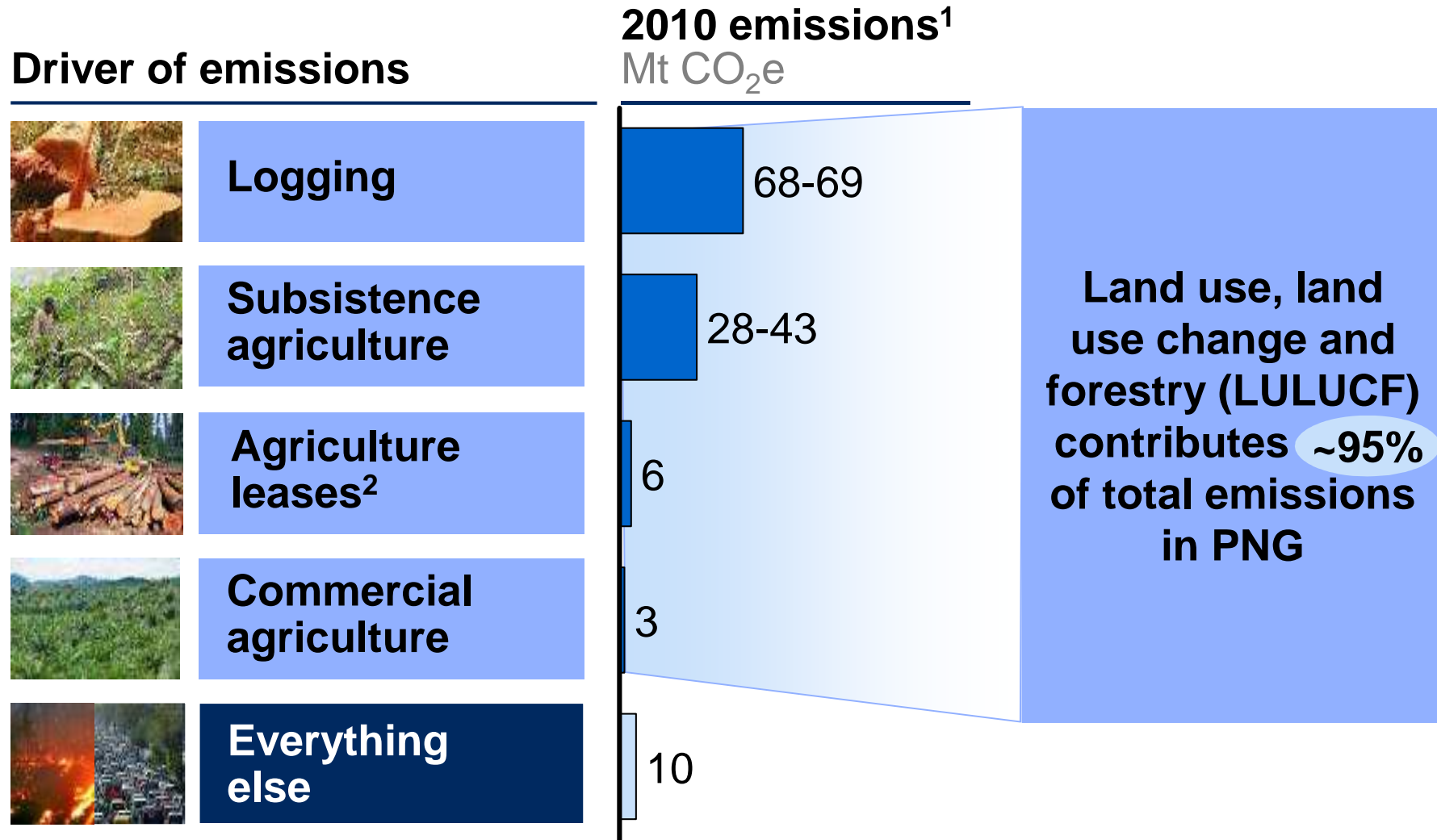


National Climate Change and Development Policy Thematic Areas

- Enabling Environment/Mainstreaming
- **Data and Information/MRV**
- Adaptation
- **Mitigation**
- Financing
- Partnership



Forestry and agriculture is the biggest driver of emissions in PNG



1 Estimate of 2010 extrapolated from 2008/09 data

2 Exact emission for 2010 still to be verified

SOURCE: REDD+ technical working group

A number of priority abatement actions have been identified

Opportunities for PNG



Reduced impact logging



Agriculture leases review



Secondary forest management



Land use planning



Afforestation/
reforestation



Agriculture ex-
tension program

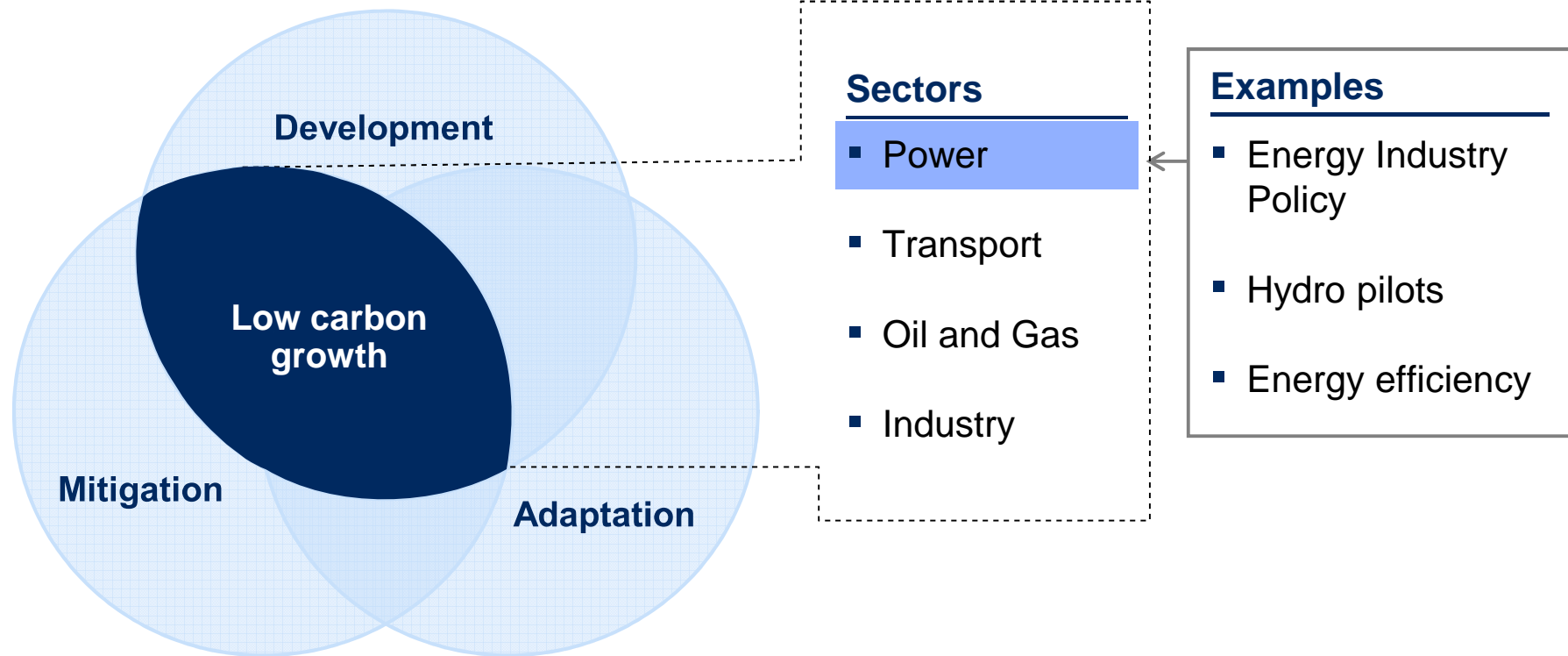


Community
REDD+ schemes



Commercial
plantation on non-
forest land

Low carbon growth includes all non-LULUCF sectors



The production of clean electricity and development of low-carbon sectors are important components of PNG's climate compatible development

Produce "Clean"-Electricity

Solar

- Solar panels convert sunlight into electricity
- Solar panels can be installed close to location of usage (roofs)



Hydroelectric power

- Benefiting from constant water flows to generate electricity
- Requires construction of pipe leading to a turbine



Geothermal

- Clean energy can be produced from heat at volcanic areas
- Requires technical expertise and large capital investments



Build Low-Carbon Sectors

Agriculture

- Invest in quality and marketing of coffee, cocoa and copra
- Increase production and quality of fresh fruit and vegetables to reduce imports



Tourism

- Promote eco- and niche tourism
- Develop hotels and activities for domestic tourist market



Processing

- Develop industry around low-cost energy hubs (hydro, geothermal)
- Encourage processing of wood and agricultural exports



Activities (Govt)

#	Type	Description	Activity	Location
1	PNGFA	April-Salome REDD+ Pilot Project	A forest concession are of 521,500 ha involve the holistic REDD+ project approach	East Sepik
2	PNGFA	Central Suau	A lowland forest concession with area of 60, 780 ha to capture reduce impact logging which also involve FPIC, land boundary mapping and land-use planning	Milne Bay
3	PNGFA	JICA/PNGFA Project	Capacity development Forest base-map	NCD
4	OCCD	UN-REDD Programme	National Monitoring System Stakeholder engagement	NCD
5	PNGFA	EU/FAO/PNG FA	National Forest Inventory	Nation-wide
6	NCD	Waste Management Facility	The National Capital District will be support by JICA to building facility for both solid and liquid waste. Potential methane capture there.	NCD

Activities (Non-Govt)

#	Type	Description	Activity	Location
1	WCS	Village REDD+ demonstration	Grassroots capacity building on forest inventory, FPIC, carbon rights study, land boundary mapping, and land-use planning.	East Sepik
2	TNC	Central Suau	Grassroots capacity building on carbon biomass measurement and land boundary mapping and land-use planning	Milne Bay
3	TNC	Manus	Ridge to reef conservation project	Manus
4	ForCert	Village base planning	Grassroots capacity building on forest inventory and conservation as a business model	East New Britain
5	ForCert	Village base planning	Grassroots capacity building on forest inventory and conservation as a business model	West New Britain

Activities (Industries)

#	Type	Description	Activity	Location
1	PNG Power Ltd	Divune Hydropower CDM Project	With the support PPL has manage to get their Program of Activity by the CDM Board is expected to generate estimated GHG emission reduction over a period of 7 years of 145,600 tCO ₂ ^{-e}	East Sepik
2	NBPOL	Methane Avoidance CDM Project	Sangara Methane Avoidance Project is expected to generate estimated GHG emission reduction over a period of 10 years of 666,360 tCO ₂ ^{-e}	Oro
3	NBPOL	Methane Avoidance CDM Project	Hagita Methane Avoidance Project is expected to generate estimated GHG emission reduction over a period of 10 years of 582,241 tCO ₂ ^{-e}	Milne Bay
4	Oil Search Ltd	Flare and Vent Gas Conservation CDM Project	The project will cover various location of their processing facilities (CPF, CPF Refinery, APF, and GPF). An estimate GHG emission reduction 674,030 over 7 years period	Central and Southern Highlands
5	STC	Grand Papua Hotel	Steamship Trading Company has build two hotels that are using 50% of their energy from solar and are recycling their water usage.	NCD

MRV

The screenshot shows the PNG National Forest Monitoring Portal in a Windows Internet Explorer browser. The address bar displays the URL <http://unredd.geo-solutions.it:9080/>. The page header includes the site logo and the title "PNG National Forest Monitoring Portal". Below the header, there is a navigation bar with a year selector set to "2010" and language options for "Français" and "English". The main content area features a map of PNG with a navigation menu on the left. The menu is organized into three sections:

- REDD+ Activity**
 - Deforestation
 - Degradation
 - Conservation
 - Sustainable forest management
 - Enhancement
- Forestry Information**
 - REDD+ Safeguards
 - Forest Management Data
- Land use/Land use changes**
 - Land use map
 - Forest land -> Other land use**
 - Other land use -> Forest land**
 - Reforestation
 - Afforestation
 - Forest land -> Forest land**
 - Selective Logging
 - Fire

The map shows the geographical outline of PNG with various colored regions. A label "Port Moresby" is visible on the map. The browser's status bar at the bottom contains the text "Technical support Brazil INPE through UN FAO team under UN-REDD National Programme".

BUR 1: Next Steps (Inventory Schedule/Timeline)



5

Lessons Learned

1

Good Political leadership is important

2

A stand alone and designated office to deal with the issue of climate change, GoPNG created Office of Climate Change & Development

3

Develop a good and sustainable network of key and relevant stakeholders that can work together to develop and implement policies

4

Alignment of different sectoral policies with the Vision 2050 Pillar 5 and the National Climate Change Policy

Lessons Learned

5

A Policy that can deliver must be supported by sustainable funding and technical support both nationally and global

6

Activities must be supported by funding that's additional, predictable transparent and credible sources like the green climate fund.

7

Very good technical support by Annex I Parties is very important for developing country like PNG

8

Capacity building is important to delivery of sustainable tangible outcomes



**Thank
you**

Email:
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Please log-on to OCCD
website for more
information

www.occd.gov.pg

Canopy Walk, a co-benefit of REDD+ Project



Questions?