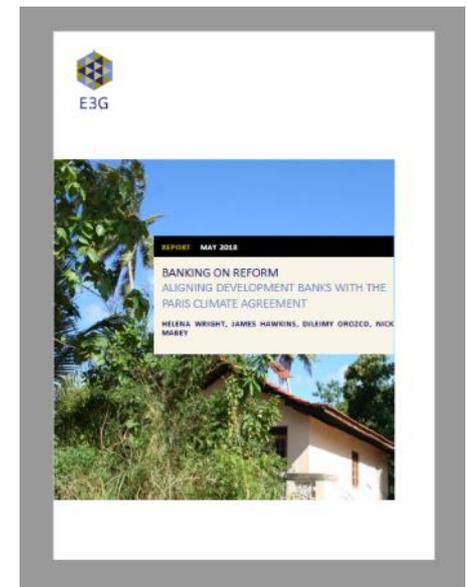




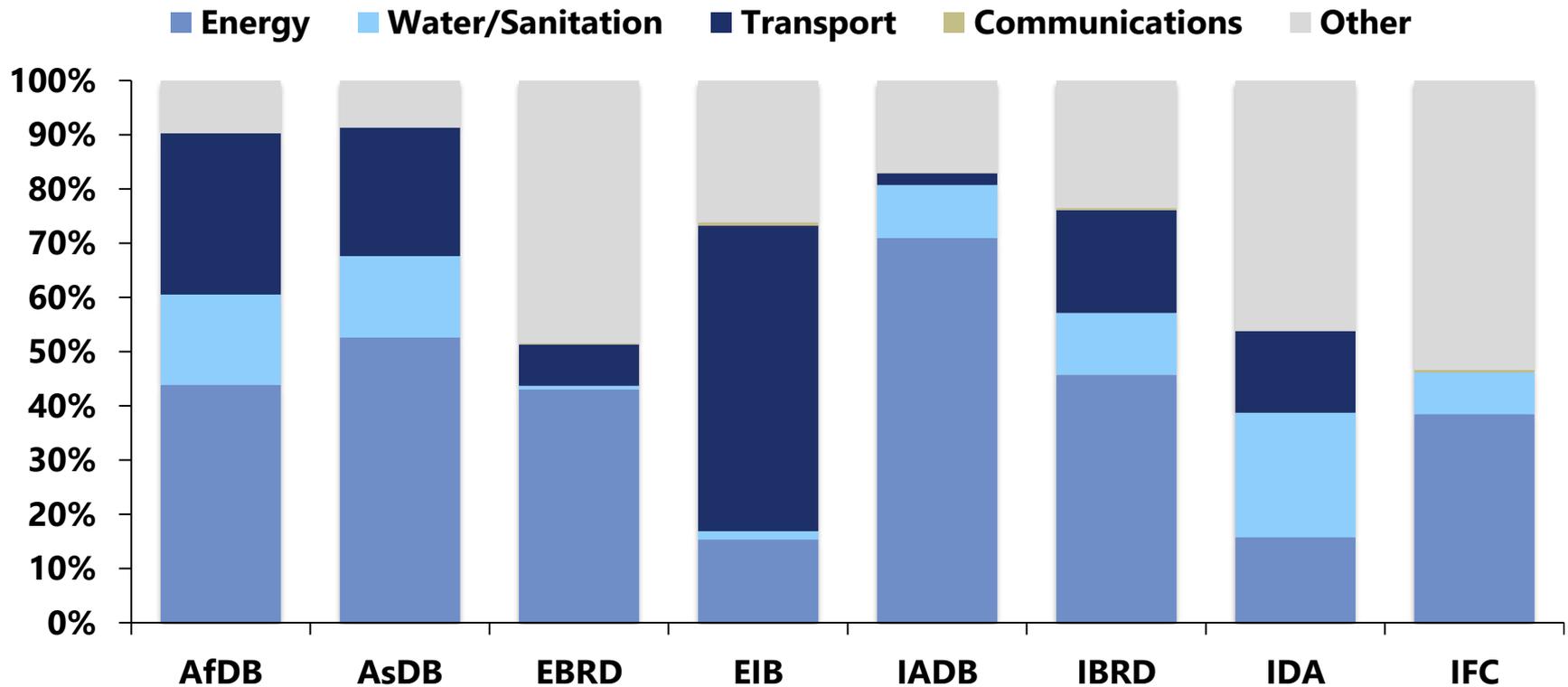
E3G

# Financing Climate Resilience: Financing Gaps, Innovative Approaches and Instruments

Dr Helena Wright, E3G



# Introduction: MDB climate finance to different sustainable infrastructure sectors (Annual avg 2015-16)



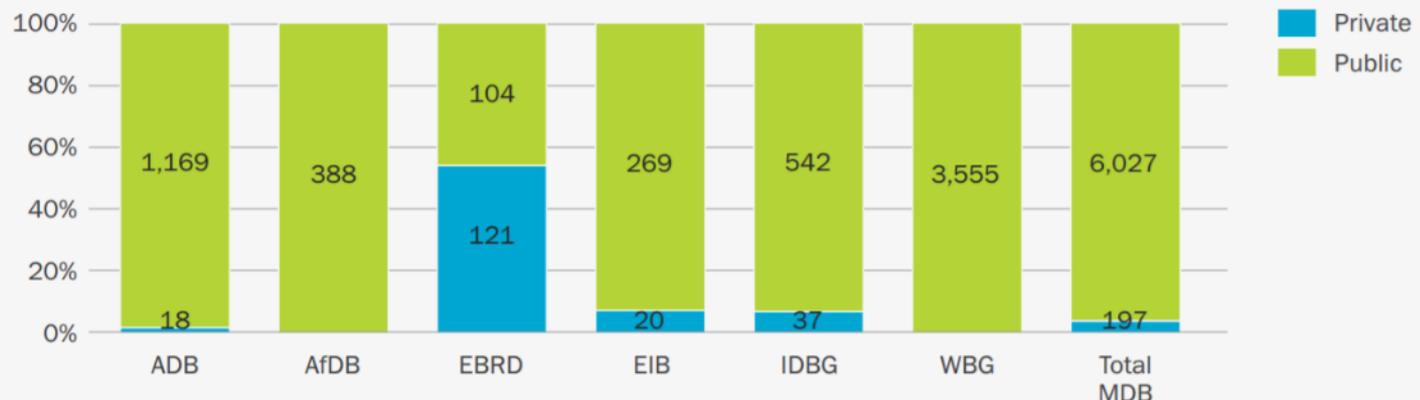
Source: E3G analysis of OECD-DAC MDB climate-related development finance (2015-6 annual average). To note that data for IFC/EBRD was missing due to reporting discrepancies.

# Introduction: Private finance mobilised by MDB adaptation finance



- MDBs 2016 Joint Report on Climate Finance showed that in 2016, there was **\$14.178bn of public mitigation finance**, which directly mobilised **\$7.039bn** of private finance for mitigation.
- However, the **\$6.027bn of adaptation finance from** MDBs directly mobilised only **\$197m (about \$0.2bn)** of private finance.
- Mobilising private sector action can play a key role in building long-term resilience.

Figure 6: MDB adaptation finance by recipient/borrower type and MDB, 2016 (in US\$ million)



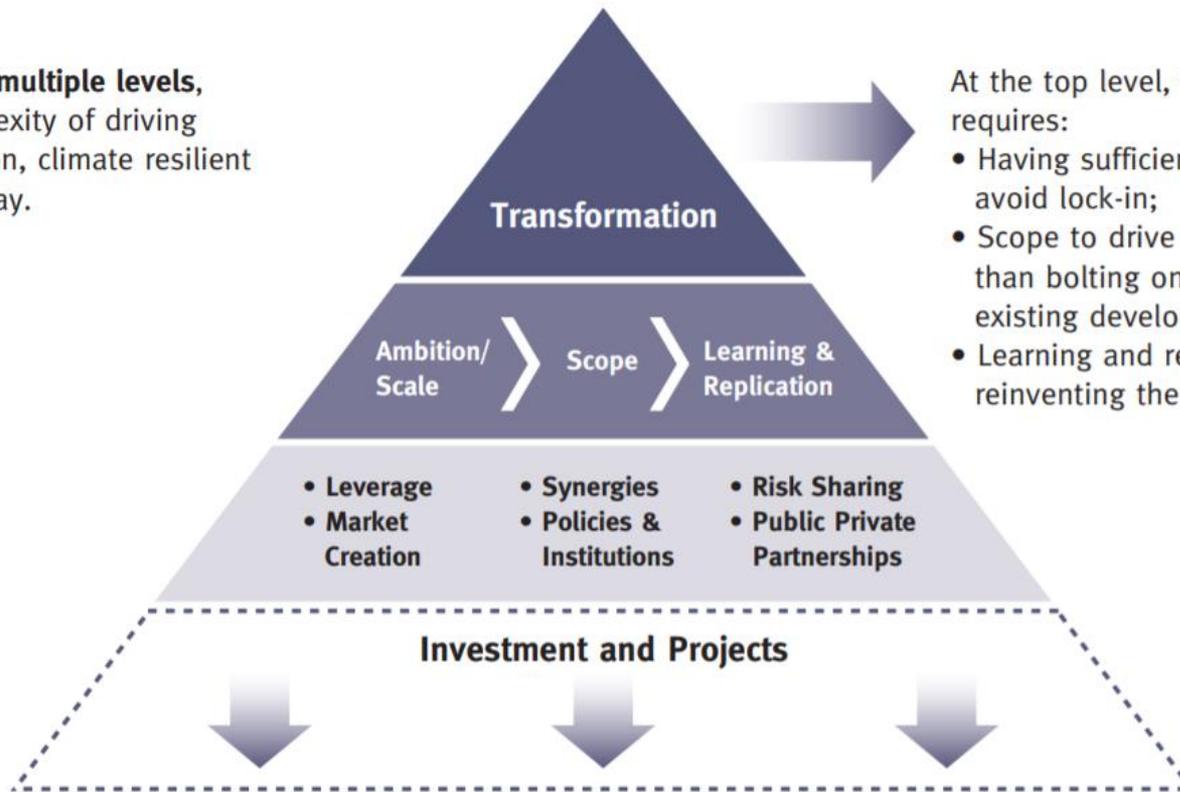
## Three innovative and potentially transformative case studies:

1. **Coral Reef Insurance** in Mexico
2. **ProAdapt** in Latin America and the Caribbean
3. **Green Bonds** in Fiji



# Conceptual framework of transformational change

Transformation has **multiple levels**, reflecting the complexity of driving towards a low carbon, climate resilient development pathway.



At the top level, transformation requires:

- Having sufficient ambition/scale to avoid lock-in;
- Scope to drive sectoral change rather than bolting on ‘climate proofing’ to existing development models; and
- Learning and replication to avoid reinventing the wheel.

# 1 - Coral Reef Insurance in Mexico



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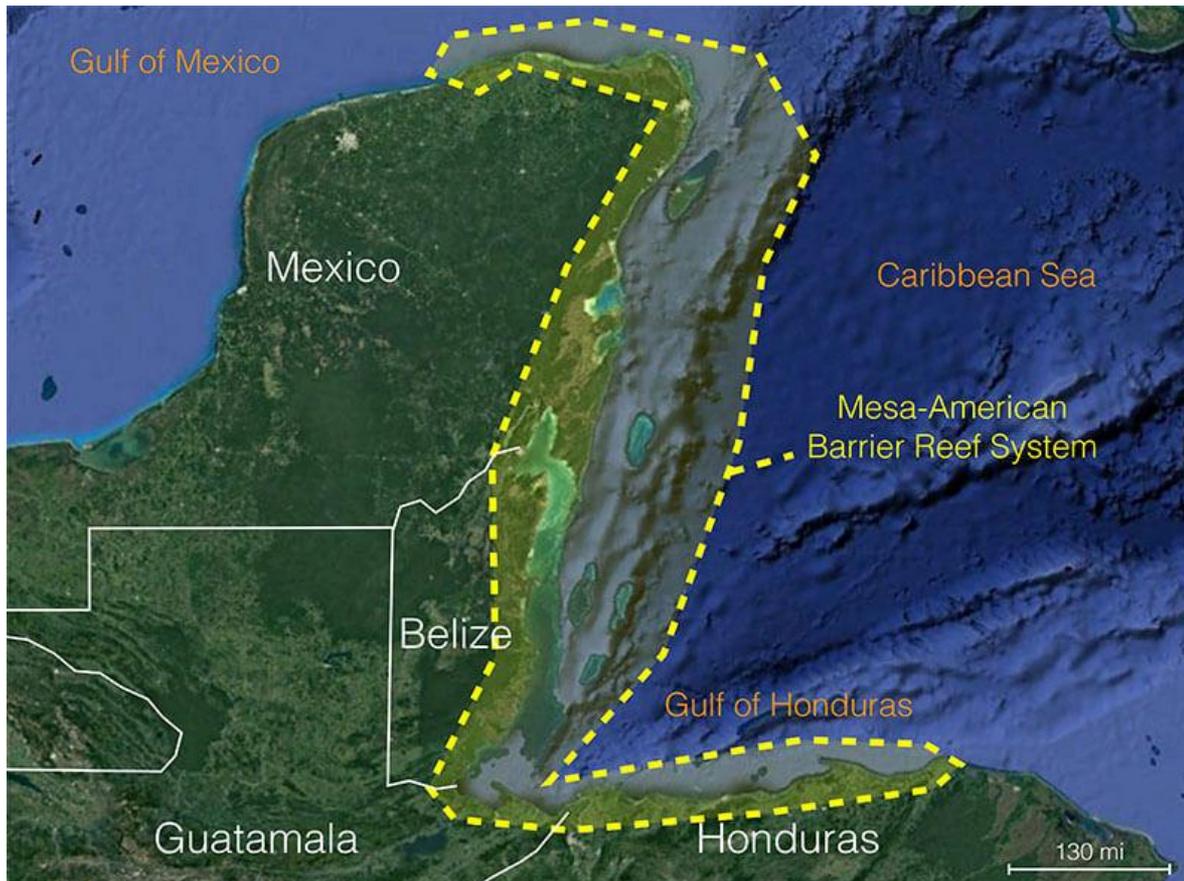
- A healthy coral reef can absorb **97% of a wave's energy before it hits the shore**
- An estimated **90% of the world's coral reefs will be degraded by 2050** even under a 1.5C warming scenario

# Coral reef vulnerability and climate finance

- Globally, **around half a billion people** rely on coral reefs for food and coastal protection.
- Coral reefs are **home to a quarter of all fish species**, and have an **economic value of around \$9.9 trillion globally**.
- E3G found only a **tiny fraction of multilateral climate finance currently goes to oceans or coral reefs**.
- E3G analysed OECD database of almost 3,000 MDB climate finance projects from 2010-15. **Only 3 of these** mentioned coral reefs (**\$4.5m out of \$67bn**).



# Mesoamerican Reef

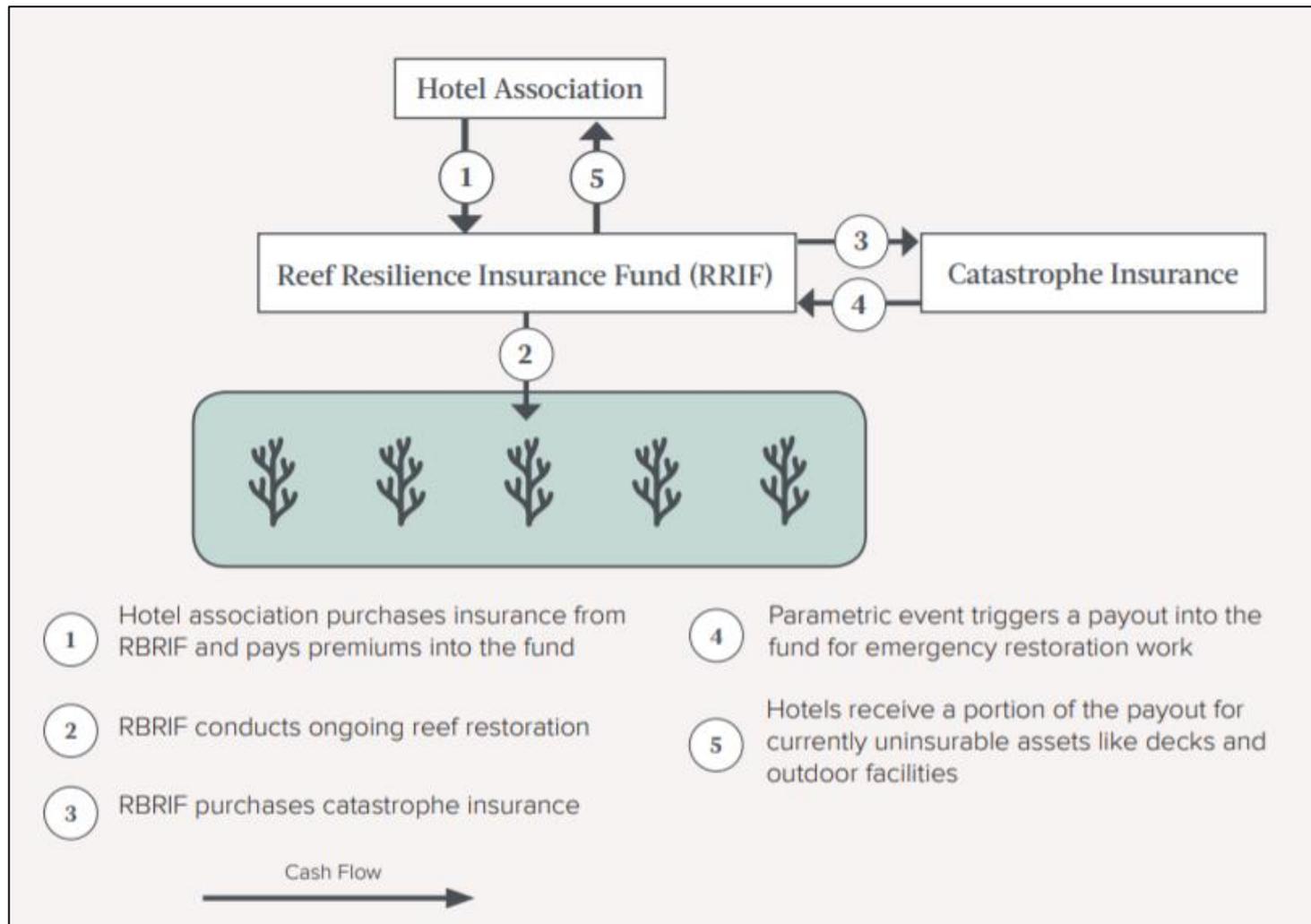


- Scientific analysis by TNC estimates that the loss of 1 metre of height in the Mesoamerican coral reef would translate into an estimated **1,300 square km of inland flooding and USD 20 billion in lost infrastructure in Mexico alone.**
- The Mesoamerican Reef is the longest barrier reef in the Western Hemisphere.

# Coral reef insurance mechanism



E3G



# Coral reef insurance: How it works



- **Coastal Zone Management Trust** was developed by the State Government of Quintana Roo in Mexico, The Nature Conservancy (TNC) and partners.
- Trust also financed the world's **first-ever parametric insurance policy covering a coral reef.**
- Funds for the trust and insurance premium **collected as a portion of the tourism taxes.**
- Design involved expertise of reinsurance firm Swiss Re.

# Coral reef insurance: Benefits of the approach



- Monetizes the protective value of nature.
- May be the “first time an insurer has covered a natural structure”.
- Actual policyholders will be the beachfront hotels.
- Parametric insurance - a large hurricane would trigger near-immediate payouts so reef repairs can begin sooner.
- Also encourages hotel owners to protect the reef.

# Coral reef insurance – Replicability

- UNDP and The Nature Conservancy (TNC) are now working together to look at what is needed well beyond this first example; and looking at how to create similar markets for nature-based insurance products in other countries.
- UNDP / TNC jointly exploring how to raise the resources to protect 500 km of critically at-risk coastline across multiple countries.
- That is expected to protect the lives of 10 million people and more than \$100 billion of assets.



*Source: Trust, 2018*

# Countries with largest coral reef areas



E3G

Rank	Country and geographical locations	Reef Area	Percentage of world total
1	Indonesia, Republic of	51,020	17.95%
2	Australia	48,960	17.22%
3	Philippines, Republic of the	25,060	8.81%
4	France <b>Including:</b> Clipperton, Mayotte, Réunion, Guadeloupe, Martinique, New Caledonia, French Polynesia, Wallis and Futuna Islands	14,280	5.02%
5	Papua New Guinea	13,840	4.87%
6	Fiji, Republic of	10,020	3.52%
7	Maldives, Republic of	8,920	3.14%
8	Saudi Arabia, Kingdom of	6,660	2.34%
9	Marshall Islands, Republic of the	6,110	2.15%
10	India, Republic of	5,790	2.04%
11	Solomon Islands	5,750	2.02%
12	United Kingdom <b>Including:</b> British Indian Ocean Territory, Anguilla, Bermuda, Cayman Islands, Pitcairn, Turks and Caicos Islands, British Virgin Islands	5,510	1.94%

Source: UNEP, 2001. *World Atlas of Coral Reefs*

## 2 – Inter-American Development Bank - ProAdapt



- **IADB's ProAdapt facility** aims to increase the climate resilience of micro, small, and medium enterprises (MSMEs) and the communities in which they operate.
- PROADAPT **works with microfinance institutions (MFIs)** to help them incorporate climate risk management in their portfolios and provide **green finance** to clients.
- Main objective is to serve as a **private climate resilience platform for the IDB Group** in Latin America and the Caribbean.
- Due to its initial success from 2013-17, the IDB and the Nordic Development Fund (NDF) are currently planning the second phase of the program to start during 2019.



# ProAdapt – Main outcomes

- **IADB committed US\$12million in technical assistance and leveraged a total of US\$23 million in the region** to help MSMEs become more climate resilient.
- By October 2017, PROADAPT had **approved 11 technical assistance projects in 14 countries.**
- The program has funded **market assessments** in sectors such agriculture, fisheries, housing and construction, water and sanitation, and transportation.
- PROADAPT has also supported an **ongoing market study in three regions (Colombia, South Africa and the Philippines)** on the market for climate resilient solutions.
- PROADAPT's initial success resulted in the decision to develop a second phase in 2019.



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# Potentially transformational impacts

- PROADAPT offers an innovative approach to **incentivise new business models** and expand awareness of threats posed by climate change to micro, small, and medium enterprises (MSMEs).
- By working with microfinance institutions (MFIs) to help them incorporate climate risk, PROADAPT can have an impact over the **whole portfolio of these institutions**.
- The Facility aims to boost domestic green markets whilst creating local private sector solutions for resilience targeted to the most vulnerable groups. Particular focus on women-owned MSMEs.
- Where else could this approach be relevant?





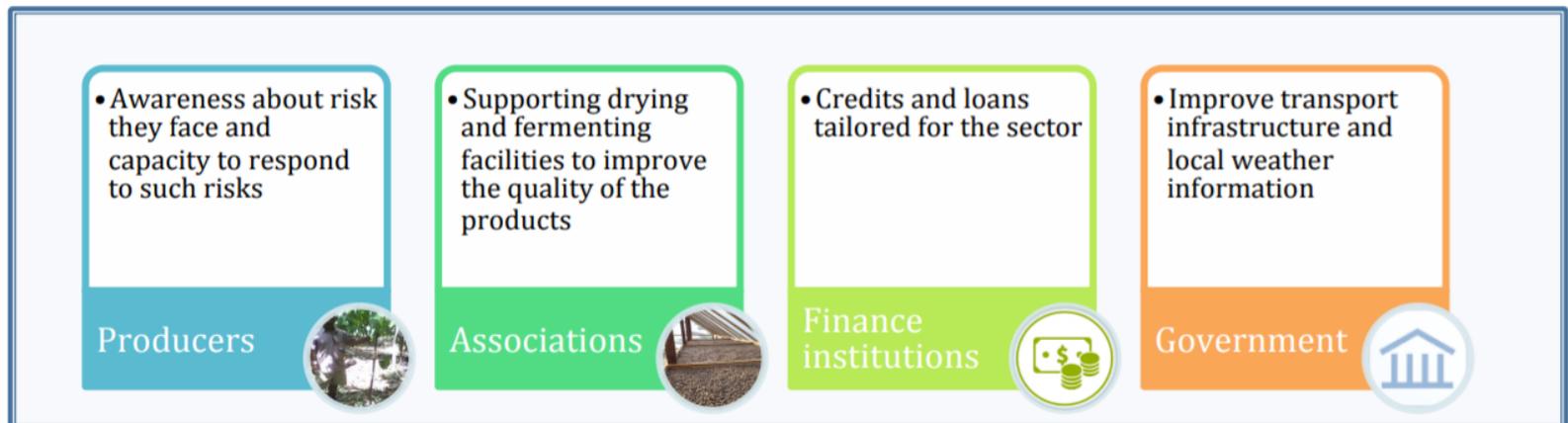
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# ProAdapt Case Study: Nicaragua

- Coffee is currently among the largest export commodities, but **suitable areas for growing coffee in Nicaragua will shrink by between 30% and 50% by 2050.**
- PROADAPT facility supports INGEMANN Nicaragua building climate resilience in **cocoa and honey production.**
- PROADAPT supported (i) Information about climate change and its impacts on the supply chain; (ii) Technological solutions to climate change; and (iii) Credit to purchase those solutions.



## Box 2. Summary of Entry Points that may help to Achieve Climate Resilience to SMEs in the Cocoa Sector in Nicaragua



# 3 - Green Bonds for Climate Resilience in Fiji



- **In 2017, Fiji** became the first emerging market (and 3<sup>rd</sup> nation in total after France and Poland) to issue a **sovereign green bond**, raising 100 million Fijian dollars.
- The damage done by 2016's Tropical Cyclone Winston caused economic losses that amounted to **around one-third of the country's GDP**.
- This green bond issuance will support both adaptation and mitigation projects.
- Likely projects to be financed with proceeds from the green bond include investments in **crop resilience, flood management in sugarcane fields, reforestation, and rebuilding schools to better withstand violent weather**.
- The investments will all follow the internationally developed **Green Bond Principles**.
- The first tranche drew unprecedented demand from investors and was oversubscribed by more than double that amount.

## WHERE THE WORLD BANK GROUP SUPPORTS ISSUERS

As pioneer issuers of green bonds, the IFC and World Bank can provide a range of technical support at the policy and transactional level to issuers including:



### Considerations before Issuance

- Guidance on purpose of issuance
- Eligible project identification support
- Terms of reference for steering committee



### Issuance

- Media and communications strategies to investors
- Roadshow presentation support



### Preparing to Issue

- Policy framework development
- Terms of reference for external reviews
- Structuring considerations
- Cost benefit analyses on stock exchange listings



### Post Issuance

- Guidance on monitoring and reporting structures
- Reporting templates

# Green bonds for climate resilience in Fiji: Lessons for other countries



- **Lessons have been learned through the issuance of the first emerging economy sovereign green bond in Fiji, which can be applied to future sovereign issuers.**
- To become sovereign green bond issuers, countries must have in place a **green bond policy framework** that reflects international guidelines for use of proceeds, disclosure, and reporting.
- Types of resilience projects eligible under Fiji’s Green Bond Policy Framework were:
  - Research and innovation and/or the acquisition of technologies and information systems to support adaptation and early warning systems
  - Flood mitigation (drainage system upgrades, etc.).
  - Drought management.
  - Resilient reconstruction to enhance the resilience of urban-infrastructure; such as through ‘Build Back Better’ principles etc.)
  - Upgrading of the transportation network to higher climate resilient design standards.

# Green bonds for climate resilience: Lessons continued



- Fiji established a **Green Bond Steering Committee**, to oversee the Green Bond implementation and allocation, chaired by the Governor of the **Reserve Bank**.
- **Ministry of Economy** is responsible for tracking Eligible Expenditures.
- Fiji used existing processes run by the **Reserve Bank of Fiji** for the conventional aspects of the bond issuance, such as market soundings, the base prospectus, registry and custodial processes.
- Benefitted from an IFC-led World Bank Group wide technical assistance.
- Ensuring compliance:
  - Verification by a third party auditor appointed to provide an annual assurance report
  - Oversight of the Green Bond Steering Committee to ensure quality control

# Green bonds: Step by step considerations before issuance

- **Purpose:** Fiji also used its green bond to encourage new domestic investors, particularly its commercial banks.
- **Pipeline of eligible expenditure;** Fiji developed a 'long list' then screened these to establish its pipeline of eligible expenditures that met the GDP Framework.
- **Governance:** Steering committee is strongly recommended.
- Consider **debt position**
- **Issuance** and ongoing costs
- **Technical support** e.g. from IFC



## Other Potentially Transformational Case Studies

- **World Bank’s MultiCat Program – a catastrophe bond issuance platform**, initiated in 2009. Mexico was the first country to utilize this facility; since then issuances have been replicated in other countries. In the latest issuance from Mexico the bond had **two layers of insurance, improving the coverage amount and trigger conditions**. However, post-disaster risk management will not address underlying vulnerability; it must be accompanied by a “build back better” strategy.
- **Qairokkum Hydropower Plant (EBRD)**: In 2014 the EBRD gave a \$50m loan to Tajikstan’s state-owned power utility to rehabilitate the 126MW Qairokkum hydropower plant - incorporating climate into the investment design – including projecting water inflow under different climate scenarios (under PPCR).
- **IADB’s NDC Invest** – Comprehensive package of assistance for NDCs e.g. NDC Pipeline Accelerator is carrying out priority studies and additional activities to ensure technical and financial feasibility for bankable and sustainable projects.
- **EIB’s Climate Action Framework Loan to Caribbean Development Bank**: First line of credit in 2011 supported CDB to mainstream climate action across its borrowing member countries. The credit line was complemented with technical assistance. EIB provided extra funds to CDB after the hurricane events of 2017.
- **IFC’s Sustainable Banking Network**: IFC hosts a body open to all banking or financial regulatory bodies with an interest in environmental management and green lending.



E3G

## About E3G

E3G is an independent climate change think tank operating to accelerate the global transition to a low carbon economy. E3G builds cross-sectoral coalitions to achieve carefully defined outcomes, chosen for their capacity to leverage change. E3G works closely with like-minded partners in government, politics, business, civil society, science, the media, public interest foundations and elsewhere. In 2016, E3G was ranked the number one environmental think tank in the UK.

More information is available at [www.e3g.org](http://www.e3g.org)

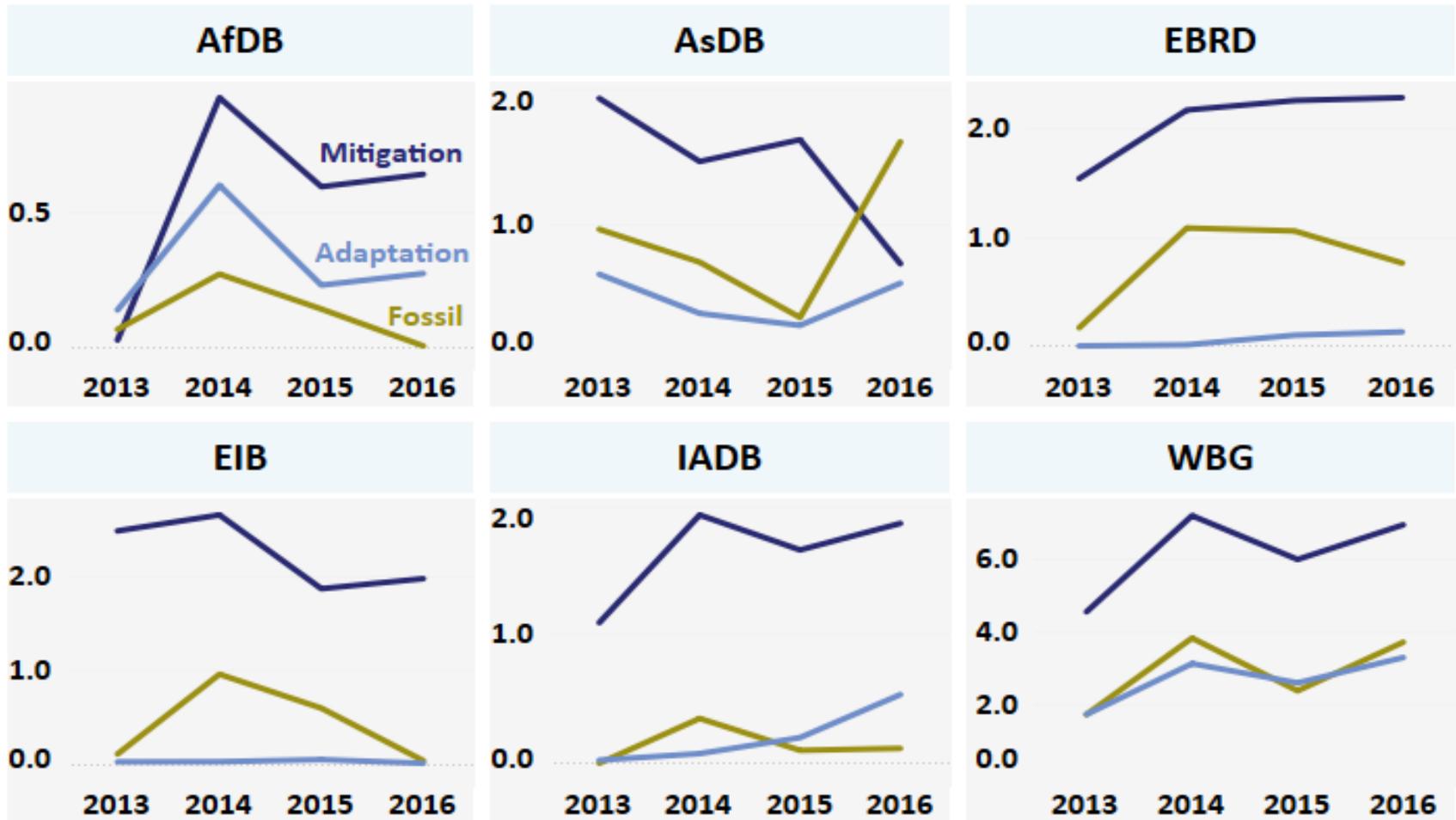


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# Annex

# Introduction: MDBs adaptation, mitigation and fossil finance trends over time



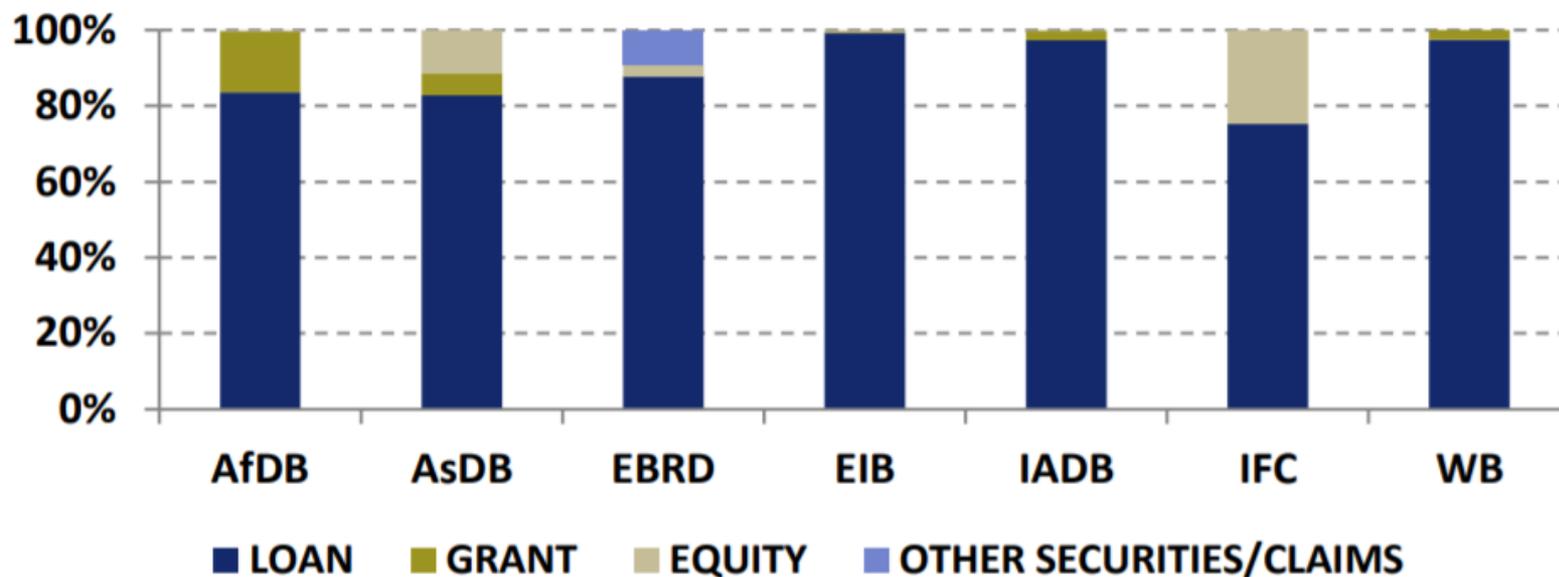
Source: Climate finance data is from data reported to the OECD-DAC; Fossil finance data is from Oil Change International



# Typology of private investors

- **Households**
- **Smallholders and small businesses**
- **Large companies (domestic)**
- **Large companies (international)**
- **NGOs, foundations, charities**
- **Companies producing/selling carbon or ecosystem credits**
- **Local financial institutions (microfinance, retail finance)**
- **Financial intermediaries**
- **Funds and institutional investors**

# Instruments used for MDB climate finance (2013-16 annual avg)



Source: OECD-DAC Climate Finance data (2013-16 annual avg)

# Project climate risk screening across MDBs

Bank	Climate Risk Screening Coverage	Summary
AfDB	Requires an assessment of vulnerability to climate change as part of the environmental and social assessment process for its public and private sector operations	Comprehensive coverage
AsDB	All AsDB projects are screened for climate risks	Comprehensive coverage
EBRD	The EBRD screens all its projects for climate vulnerability, there is also a focus on providing technical support for each project	Comprehensive coverage
EIB	Since 2015, EIB has screened for climate risk in its External Lending Mandate (ELM) and Africa, Caribbean and Pacific (ACP) projects. EIB's Climate Strategy sets out the objective of screening 100% of EIB's projects by 2020.	Comprehensive coverage by 2020
IADB	Disaster Risk Management Policy applies in both public and private activities, and to Multilateral Investment Fund (MIF)	Comprehensive coverage
IBRD/IDA	All new IDA projects are screened for short and long terms climate change risks	Comprehensive coverage
IFC	IFC is piloting climate risk tools for a number of climate vulnerable sectors – limited information is available at present	No information

Sources: AfDB (2015); AsDB (2014); EBRD (2017); EBRD (2016); IADB (2007); World Bank (2018)



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# GCF Finance for Climate Resilience: Status, pipeline development and complementarity

*Jason Spensley*

*Senior Specialist, Adaptation Planning & Project Preparation*

CIF – PPCR

Manila, Philippines | 22 May 2018



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# Overview



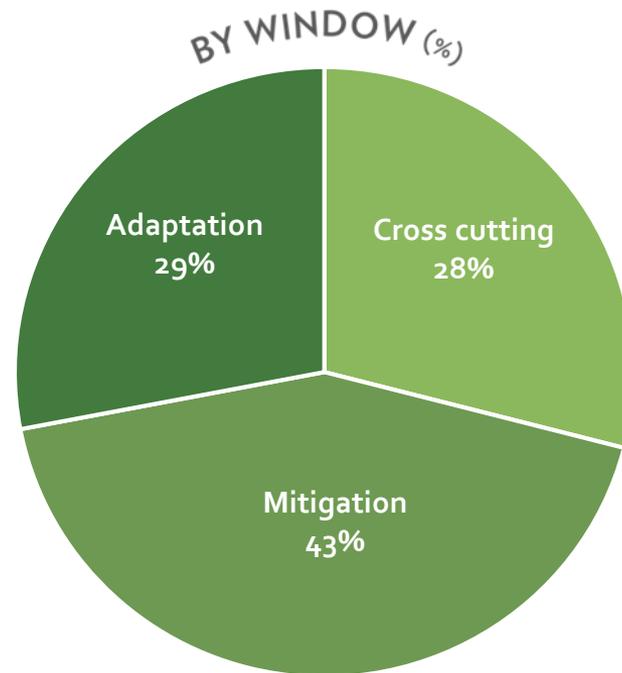
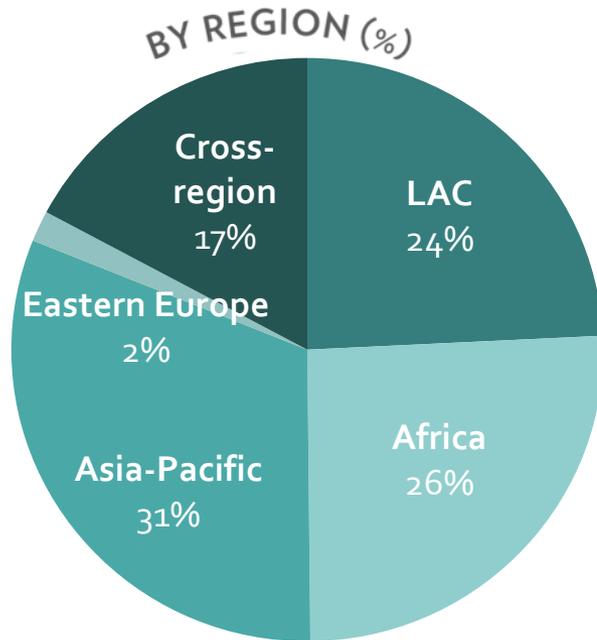
1. Status of GCF portfolio
2. Considerations for quality and impact
3. Opportunities for complementarity



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# Composition of the growing portfolio

76 projects/programmes committed  
totaling USD 3.74 billion of GCF funds



Mitigation impacts Adaptation Mitigation Cross-cutting   
1.32 BtCO<sub>2</sub>eq

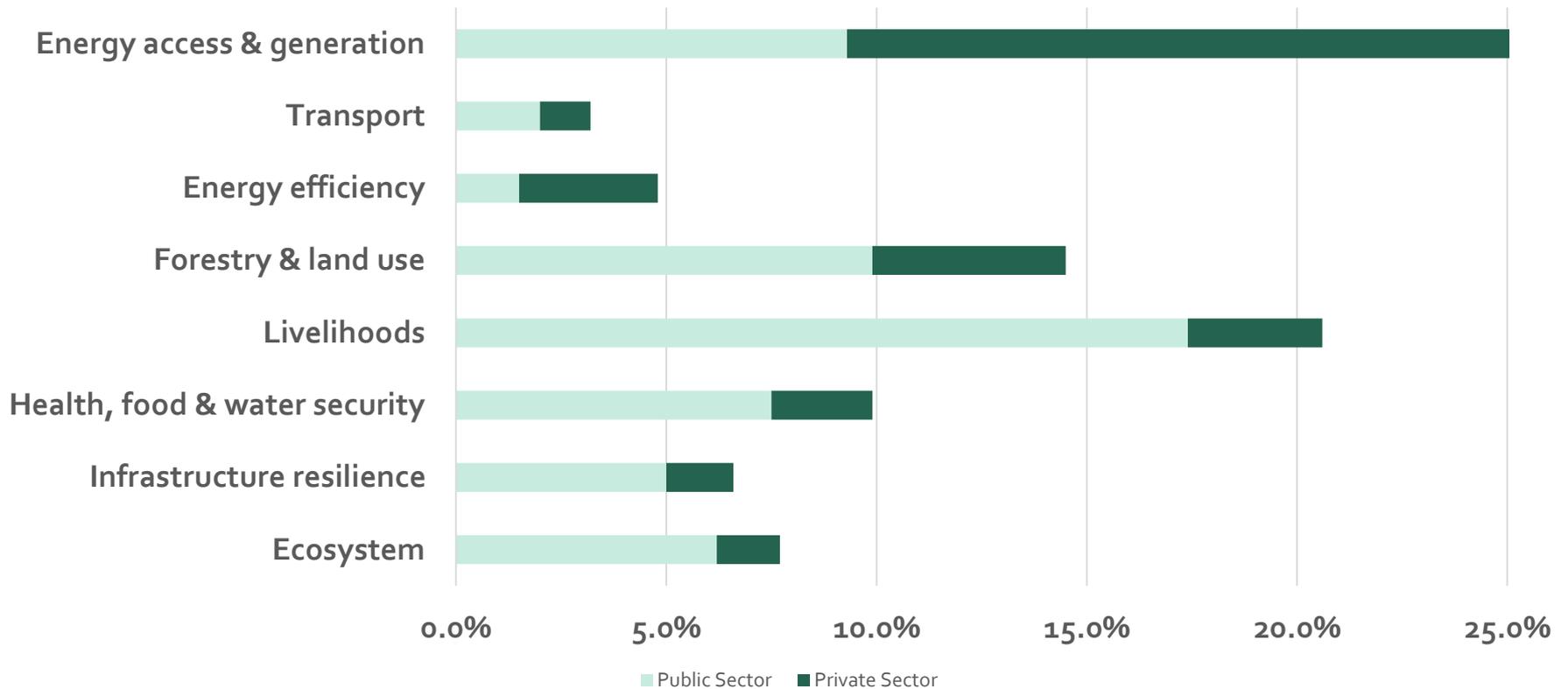
Adaptation impacts  
217 M beneficiaries



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# Composition of the growing portfolio

Requested GCF finance by Results Area (%)

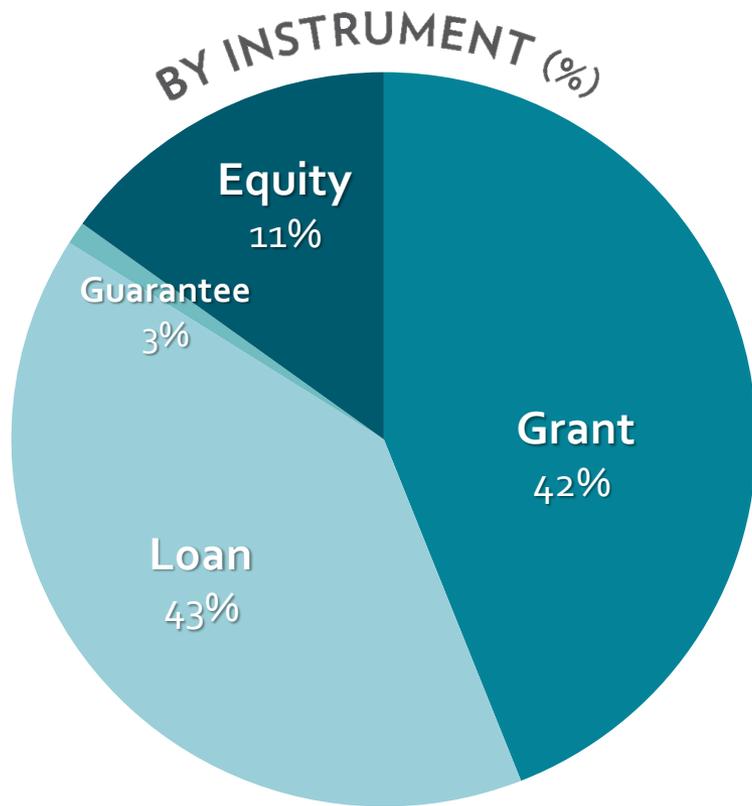




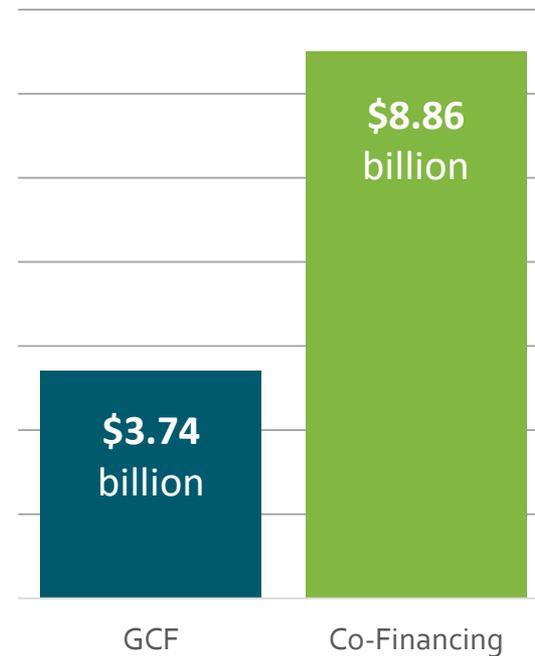
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# Composition of the growing portfolio

## GCF finance committed



## CO-FINANCING



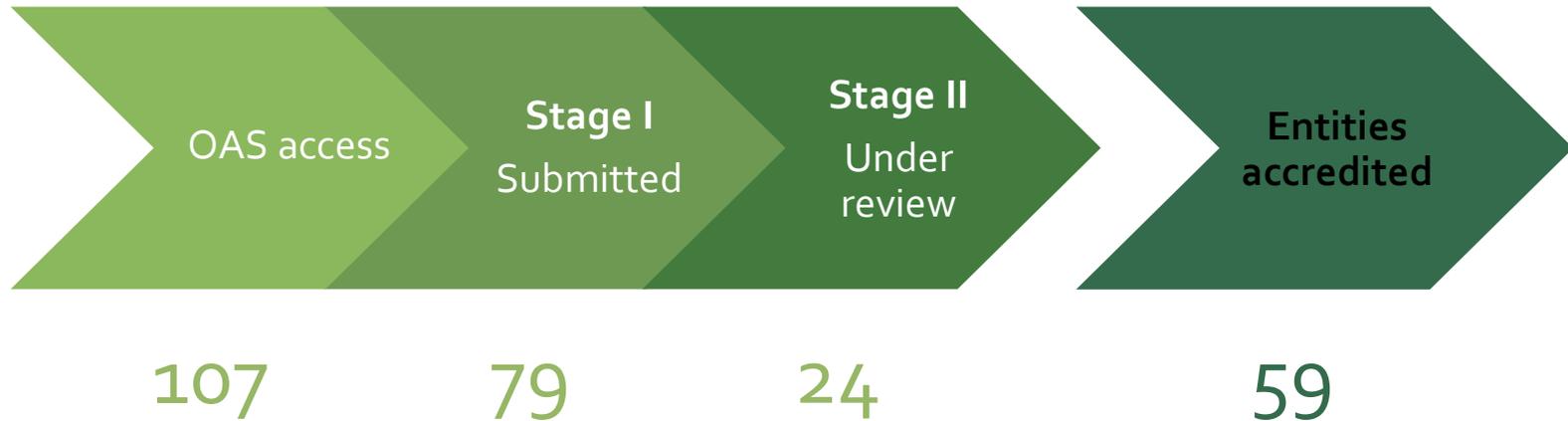
Total GCF funding USD 3.74 billion



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# Accreditation: State of play

## Pipeline of 210 entities





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# Overview



1. Status of GCF portfolio
2. **Considerations for quality and impact**
3. Opportunities for complementarity



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# GCF Investment Criteria

Impact potential	Potential to contribute to achievement of Fund's objectives and result areas
Paradigm shift potential	Long-term impact beyond a one-off investment
Sustainable development potential	Wider economic, environmental, social (gender) co-benefits
Country ownership	Country ownership and capacity to implement (policies, climate strategies and institutions)
Efficiency & effectiveness	Economic soundness, cost-effectiveness and co-financing for mitigation
Responsive to needs of recipients	Vulnerability and financing needs of beneficiary in targeted group



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# GCF Investment Criteria

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**Responsive to needs of recipients**

Vulnerability and financing needs of beneficiary in targeted group



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# Adaptation Rationale

- 1. Climate impact and vulnerabilities:**
  - a) Climate impact aiming to address
  - b) Specific vulnerabilities resulting from this impact



- 2. Prioritized interventions based on strategic analysis of options**



- 3. Integration to broader domestic and international agendas**



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# Examples of what GCF is looking for

## 1. Climate impact and vulnerabilities:

- a) Climate impact aiming to address
- b) Specific vulnerabilities resulting from this impact

### III. Vulnerability of ecosystems:

- a) Quantification
- b) Valuation
- c) Attribution

## I. Selection of interventions:

- Impact and vulnerability with vs. without GCF investment (project scenarios)
- Cost and impact of different solutions

## 2. Prioritized interventions based on strategic analysis of options

### II. Sustainability of infrastructure investments:

- a) Financing maintenance
- b) Maintenance expertise
- c) Ownership/governance

## 3. Integration to broader domestic and regional development

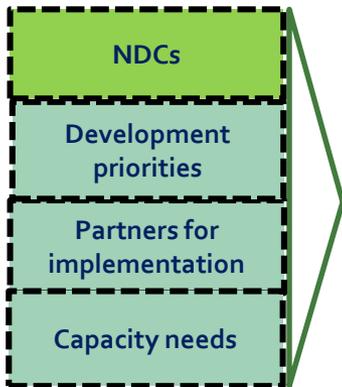


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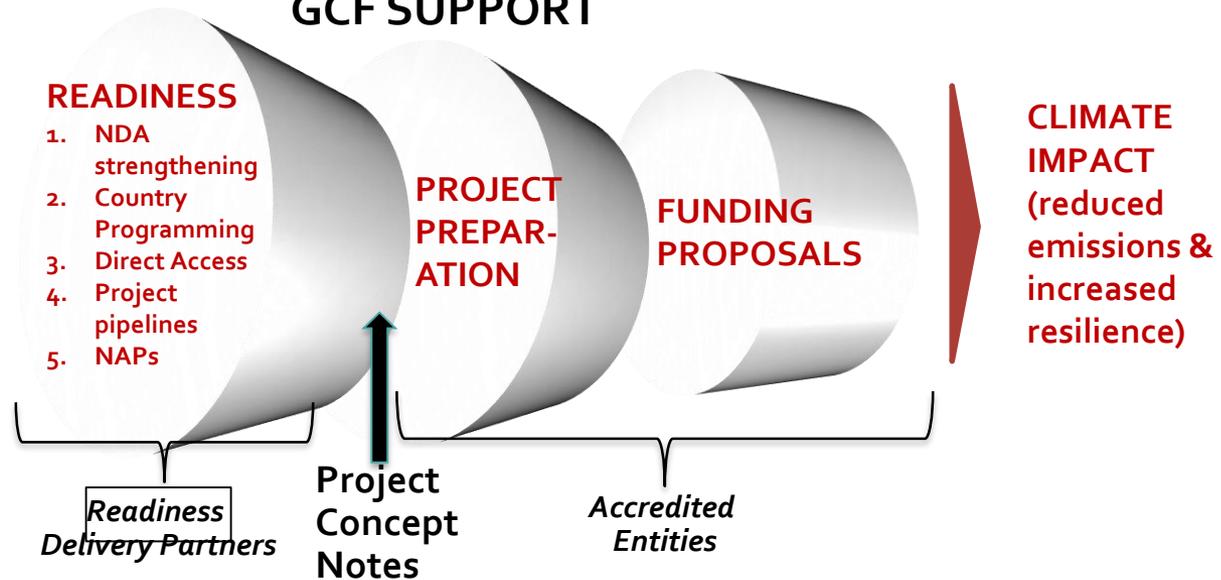
# GCF Programming

Country programming process for high quality pipelines that GCF can finance

## COUNTRY VISION



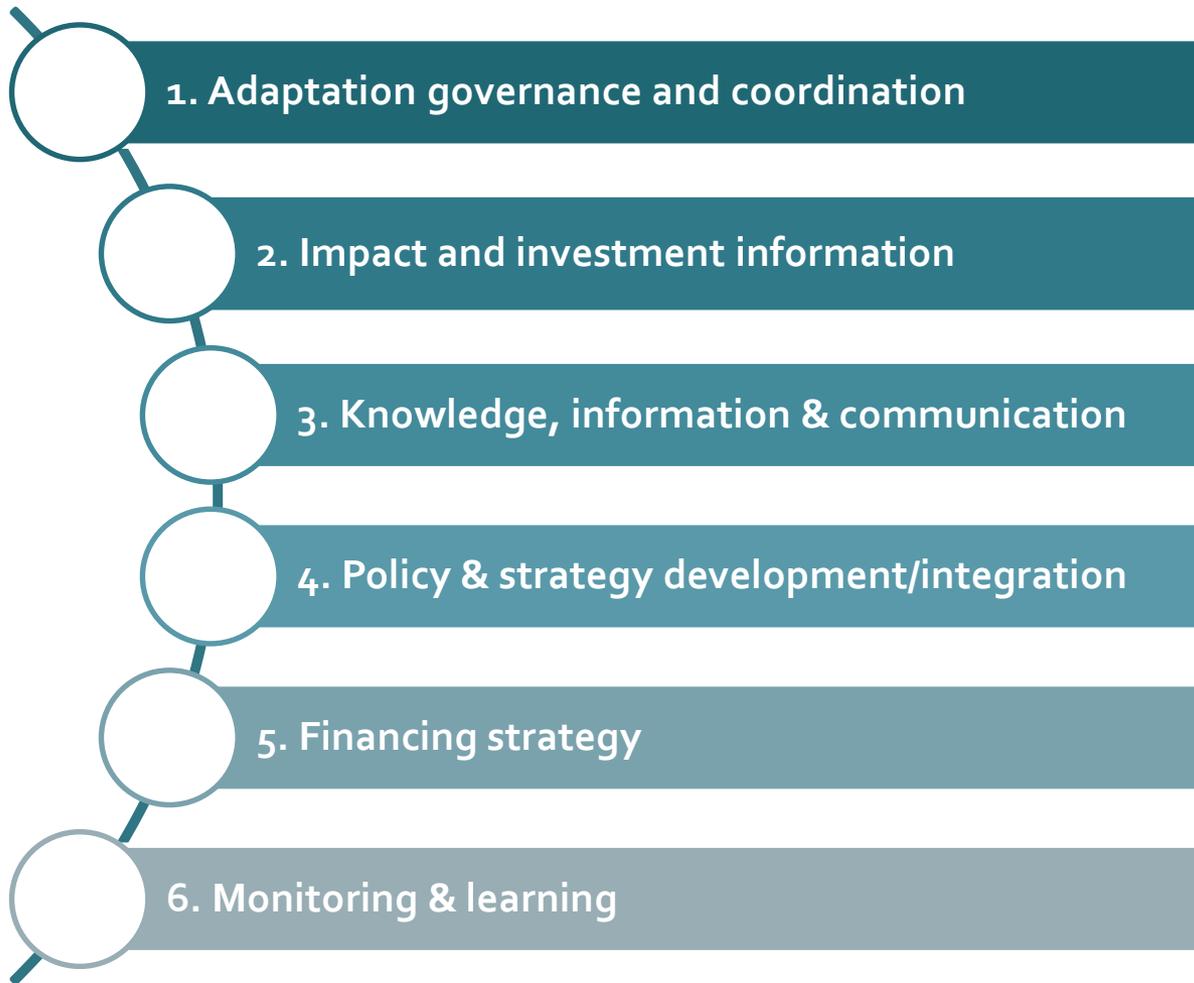
## GCF SUPPORT





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# Adaptation planning outcomes supported





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# Overview



1. Status of GCF portfolio
2. Considerations for quality and impact
- 3. Opportunities for complementarity**

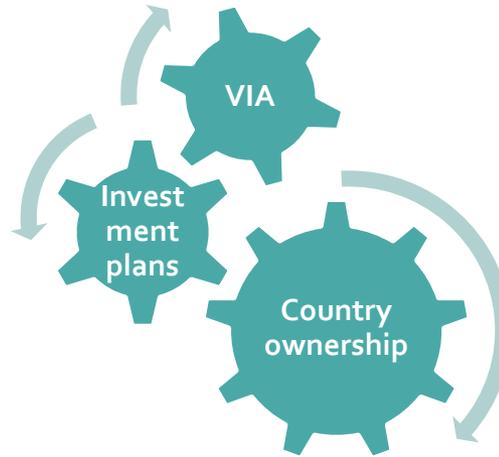


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# Opportunities for complementarity in CIF and GCF programming

PPCR Strategic Programmes for Climate Resilience

Opportunity A)  
SPCR elements can  
feed into different  
GCF programming  
elements



Opportunity B)  
Driven by countries,  
PPCR projects can be  
built on with GCF  
finance

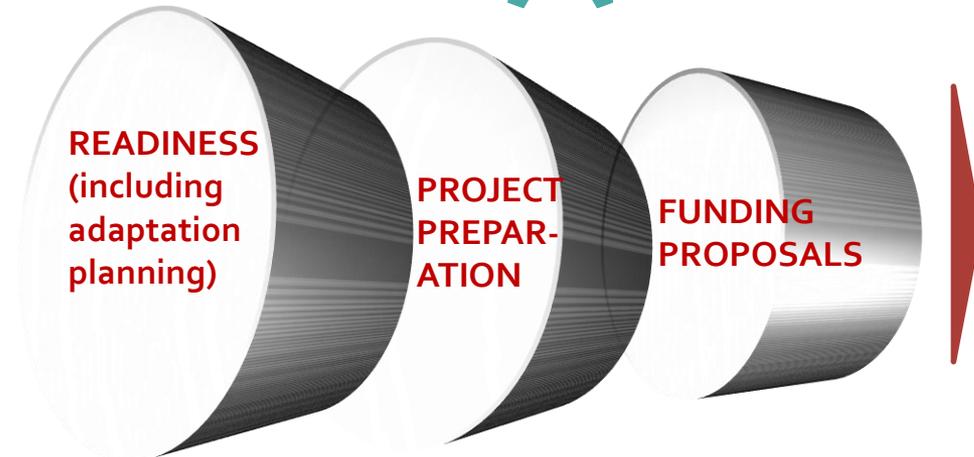
GCF  
Support:

READINESS  
(including  
adaptation  
planning)

PROJECT  
PREPAR-  
ATION

FUNDING  
PROPOSALS

CLIMATE  
IMPACT





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# Readiness: Four areas of support

1. NDA strengthening

2. Strategic frameworks

3. Support for direct access entities

4. Adaptation planning processes

Up to USD 1M per  
country per year

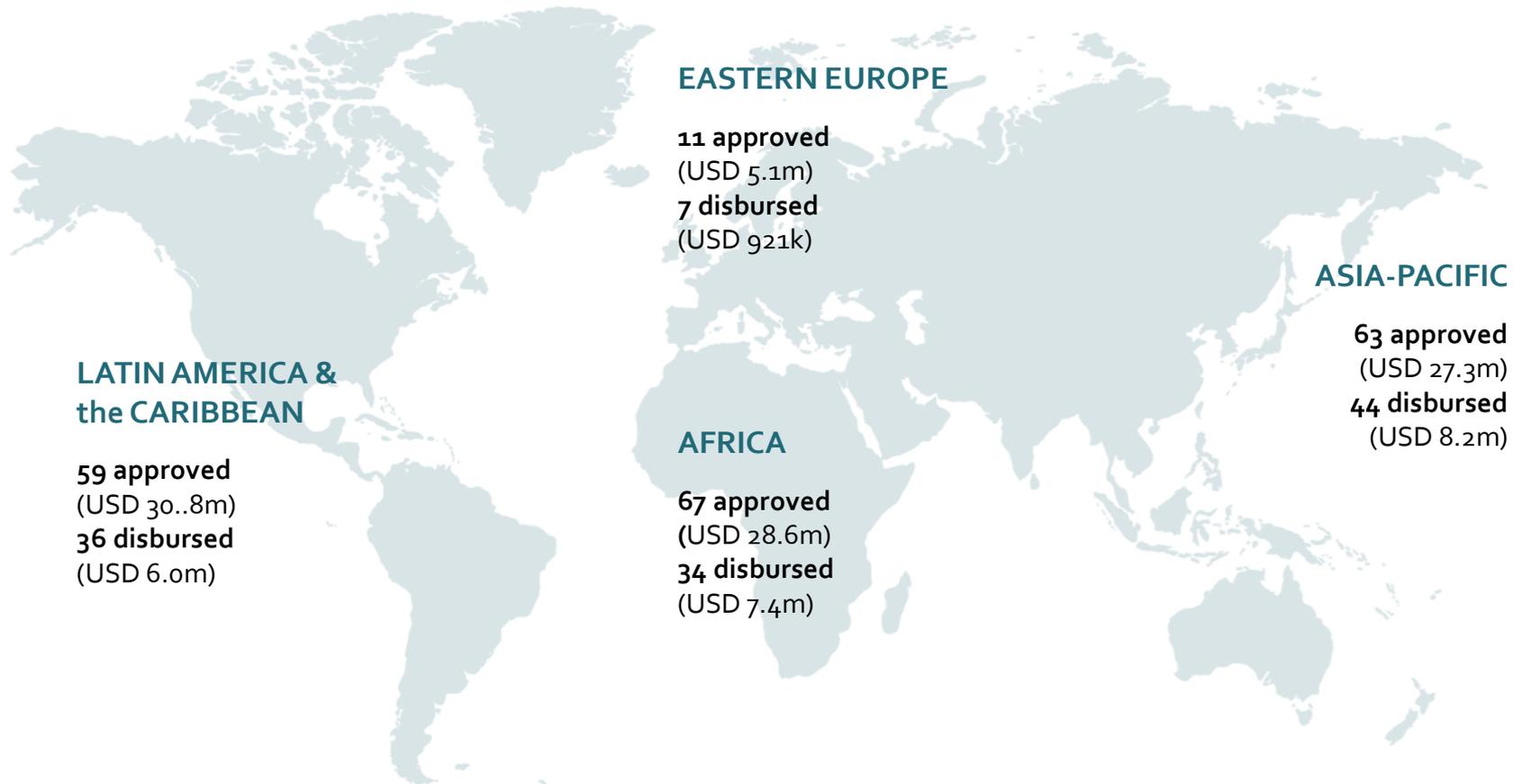
Up to USD 3M per  
country  
(not per year)



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# Readiness support

\$102m approved for 94 countries





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# Adaptation Planning Support

	Submitted	Approved + Endorsed	Pending resubmission	
			by Secretariat	by NDA
<b>Total status on 30 April 2018</b>	<b>50</b>	<b>22 (14+8)</b>	<b>5</b>	<b>23</b>
<i>Total status on 1 Jan 2018</i>	<i>40</i>	<i>8 (3+5)</i>	<i>14</i>	<i>18</i>





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# Adaptation Planning Review Criteria

1. Focus strategically within a national vision

2. Plan to address specific climate impacts and vulnerabilities

3. Develop financing strategy for each adaptation priority

4. Articulate theory of change

5. Avoid duplication of effort

6. Engage stakeholders proactively

7. Build gender considerations

8. Cultivate private sector investment

9. Monitor and report systematically

10. Coherence and complementarity with other funds



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# Project preparation facility

---

## What is on offer?

Support for project preparation leading to catalytic Funding Proposals

Especially for Direct Access Entities and micro-small size projects

Up to USD 1.5M in grants, repayable grants or equity

---

## How to apply?

Accredited Entities (especially Direct Access) submit requests

Request submitted with Project Concept and NDA no-objection

---

## What is assessed?

Underlying project assessed against GCF investment criteria

Project preparation activities assessed against needs & policies

Approval by Executive Director

---



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# Project Preparation Facility

26 active requests covering 34 countries



Especially for  
Direct Access  
Entities and micro  
to small scale  
projects

Requests involve  
14 LDCs and 12  
SIDS

13 approved +  
endorsed  
(9+4)



24 pending  
resubmission  
from AE with  
Secretariat  
feedback

# **Building Institutional Capacity for Climate Finance Coordination in the Kyrgyz Republic**

**Nurgul Esenamanova, Associate, EBRD**  
**22 May 2018**



**European Bank**  
for Reconstruction and Development

# Presentation Overview



**European Bank**  
for Reconstruction and Development

- Climate finance landscape
- Case Study: Climate Finance Coordination Mechanism of the Kyrgyz Republic
- Lessons learned

- **International climate finance is being scaled-up significantly** in-line with international climate change agreements.
- The **scale of this finance** is creating **opportunities for recipient countries to undertake transformative investments in climate resilience** for priority socio-economic sectors, improved infrastructure and private sector growth.
- There is already strong **competition among developing countries for climate finance**.
- In this context, strengthening the capacities of governments to meet the requirements of key climate funds will help them to become well positioned to access climate finance **from all possible sources**, most notably from the GCF.



## Climate Investment Funds

- Total global resources > **USD 6 billion**
- > **USD 1 billion** earmarked for climate resilience under PPCR
  - Grants and highly concessional loans
  - Current resources largely committed; replenishment pending

## Green Climate Fund

- Total global resources > **USD 10.3 billion**
  - Grants and highly concessional loans
- Committed USD 3.7 billion into projects

# Case study: Tajikistan's use of climate finance

Tajikistan has been eligible for the PPCR since 2009

- Total PPCR finance received: **USD 76.5 million**
  - **USD 61.5 million** as grants
  - **USD 15 million** as highly concessional loans
- Additional MDB finance leveraged > **USD 100 million**
- Sectors supported: hydropower, agriculture/rural development, hydromet services, private sector development plus capacity to manage climate finance

PPCR is also accelerating Tajikistan's access to the Green Climate Fund

- 2016 pipeline for GCF funding was >USD 160 million
- Leveraged MDB finance expected > **USD 200 million**
- Sectors to be supported: hydropower, water supplies, agriculture/rural development, private sector development

# Case study: Modernisation of Qairokkum hydropower plant (Tajikistan)



European Bank  
for Reconstruction and Development

Modernisation of 174 MW hydropower facility to cope with increasing climatic variability.

Total project cost: USD 76 million:

- USD 11 million grant and USD 10 million concessional loan from the PPCR
- USD 50 million loan from the European Bank for Reconstruction and Development (EBRD)
- USD 5 million grant funding from EBRD, UK and Austria for Technical Assistance

**Next phase:** GCF to provide USD 50 million plus EBRD/EIB finance of USD 170 million for modernisation phase II.



# Case study: Making rural livelihoods resilient to climate change (Tajikistan)

Supporting adoption of agriculture, land, and water practices and technologies by rural communities to increase productivity and safeguard livelihoods against climate change.

Total project cost: USD 21 million:

- USD 11.45 million PPCR grant
- USD 5.4 million GEF grant
- USD 1.8 million IDA grant
- USD 2.29 million in community co-financing

Project concept being replicated for a USD 9 million GCF grant.





# The case study of the Kyrgyz Republic

# Kyrgyz Republic



European Bank  
for Reconstruction and Development



# The Kyrgyz Republic's vulnerability to climate change

- The Kyrgyz Republic is **highly vulnerable to climate risks** due to the high frequency of climate-related disasters, its **dependency on climate-sensitive economic sectors** and its ageing infrastructure.
- The key challenges in tackling climate change are ensuring food security, managing disaster risks, protecting infrastructure, maintaining health and energy security, and adaptation interventions.
- The National Strategy for Sustainable Development (NSSD) 2013-2017 states that **USD 10.7 billion is needed for 5 key sectors (agriculture, energy, transport & communications, manufacturing & logistics, and mining).**



# Impacts on people and economy



European Bank  
for Reconstruction and Development



# The Kyrgyz Republic's national policies on climate change

- Climate change is a priority issue within the Kyrgyz Republic
- Significant work has already been undertaken in the Kyrgyz Republic on Climate Analysis/ Profile, identifying Priority Directions for Adaptation and developing Sector Strategies.

**KR Government Resolution  
“On Approval of Priority  
Directions on Adaptation to  
Climate Change till 2017”  
(dated 02.11.2013, # 549)**

- Water resources
- Agriculture
- Energy
- Emergency Situations
- Health Care
- Forestry and Biodiversity
- Information sharing, education and scientific capacity

**Sectoral Programmes on  
Adaptation to Climate Change**

- Ministry of Agriculture and Land Reclamation (crop farming, livestock breeding and pastures, water resources)
- Ministry of Emergency Situations (emergency situations)
- Ministry of Health (health care)
- State Agency of Environment Protection and Forestry (forest and biodiversity)

**Climate Profile of the Kyrgyz  
Republic (2013)**

- Climate analysis
- Impacts of climate change on some key economic sectors
- Gender analysis

# Moving from climate policy to climate resilient investment planning

The Climate Investment Funds' Pilot Program for Climate Resilience (CIF PPCR) has provided USD 1.5 million in technical assistance to assist the Kyrgyz Republic with:

- Developing a strategic climate investment planning framework:
  - The **Strategic Programme for Climate Resilience (SPCR)** – referred to in KR as **Climate Investment Programme (CIP)**
- Establishing a well-functioning Climate Finance Coordination Mechanism (CFCM), including a Climate Finance Center (CFC):
  - To **access climate funds** and channel climate and development finance into **climate-smart investments** supportive of the country's **development priorities**
- Developing bankable climate resilience investment projects:
  - To **perform sector and project analysis**

# CFCM and CIP participatory consultation process

An extensive stakeholder participation process carried-out over two years (Oct 2015 – Oct 2017) led to the development of the Kyrgyz Republic Climate Investment Programme

- Four Joint PPCR Missions to the Kyrgyz Republic
- PPCR Consultation Website: [WWW.CLIMATEFINANCE.KG](http://WWW.CLIMATEFINANCE.KG)

## Implementing MDBs

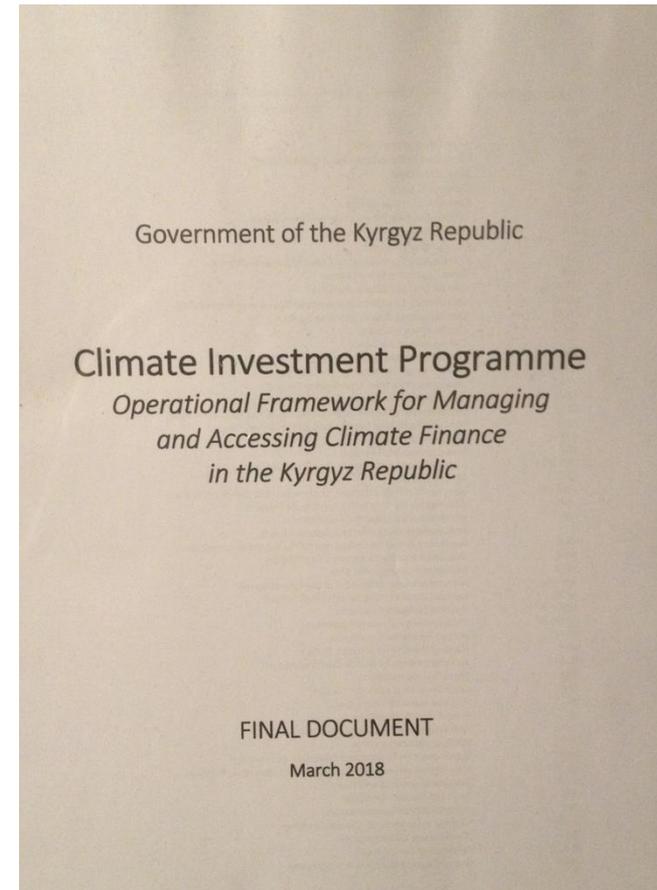
- EBRD as lead MDB
- World Bank
- ADB

## Consultations

- National level consultations with line ministries and agencies
- Regional level consultations with sub-national authorities
- Involvement of local and international NGOs, research institutes and private sector
- Consultations with development partners active in the Kyrgyz Republic

- Nationally-led process for setting up the Kyrgyz Climate Finance Coordination Mechanism (climate resilience strategic planning, delivery and monitoring)
- Nationally-led process for the identification of climate resilience investment priorities

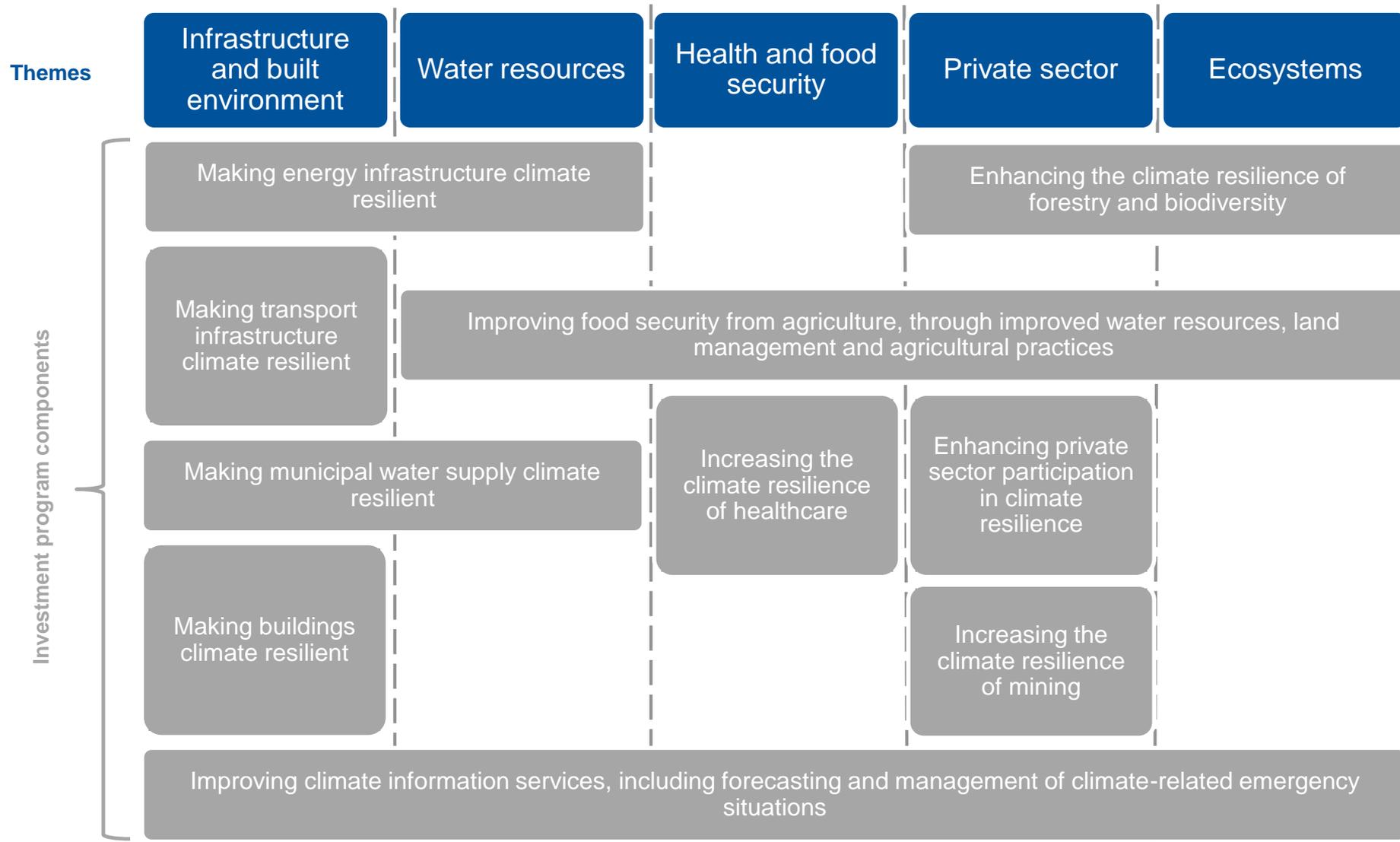
- Sets-out the Government's investment program for climate resilience in key economic sectors
- Provides a platform for accessing climate finance
- Designed to enable easy coordination with climate finance providers (GCF, CIF, GEF)
- Facilitates coordination of climate finance with development partners
- Is Government-owned and aligned with national strategies (existing and planned)
- Acts as a management tool for the Climate Finance Center (CFC)



# Identified priorities for climate resilience in the Kyrgyz Republic: Investment program components

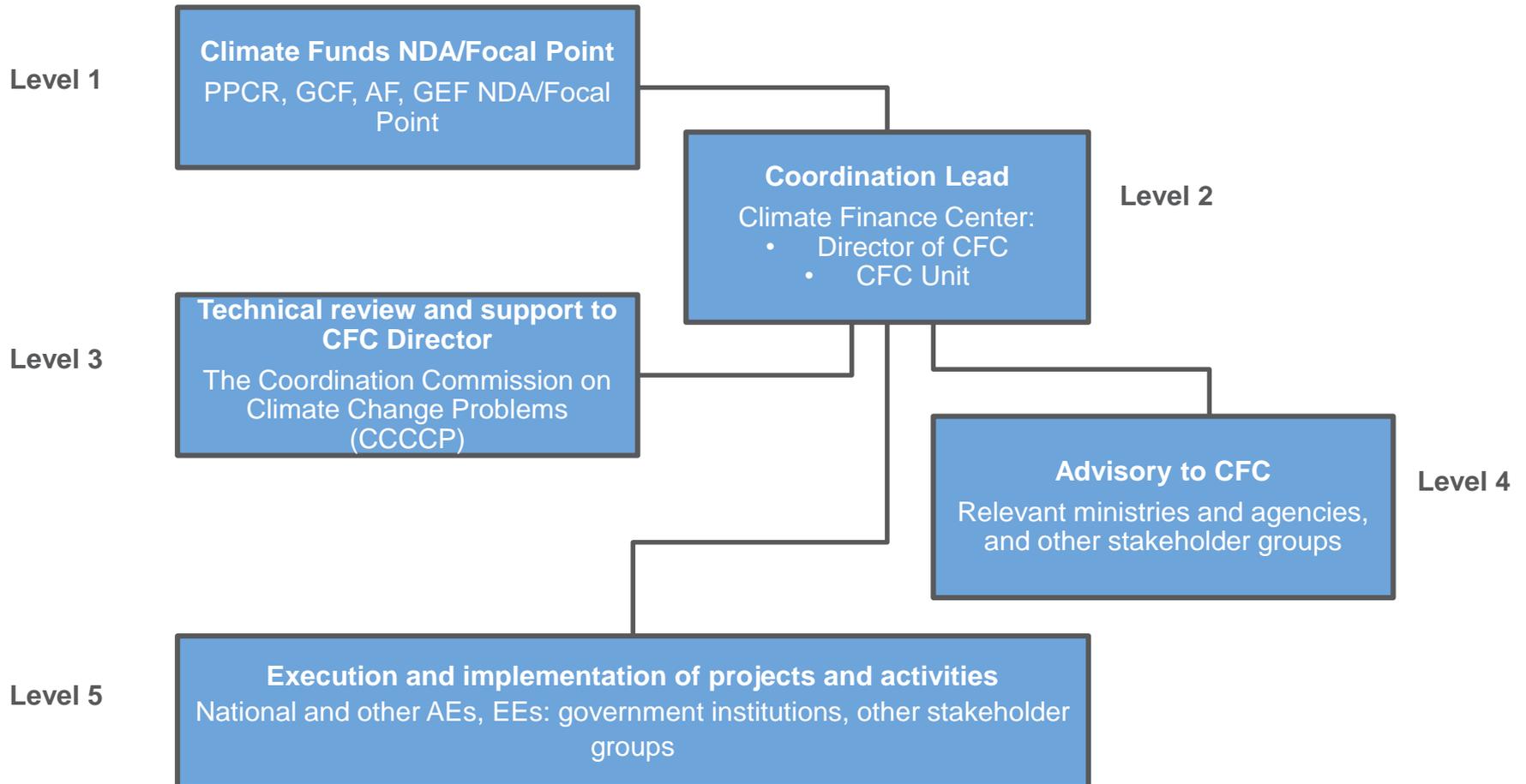


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for Reconstruction and Development

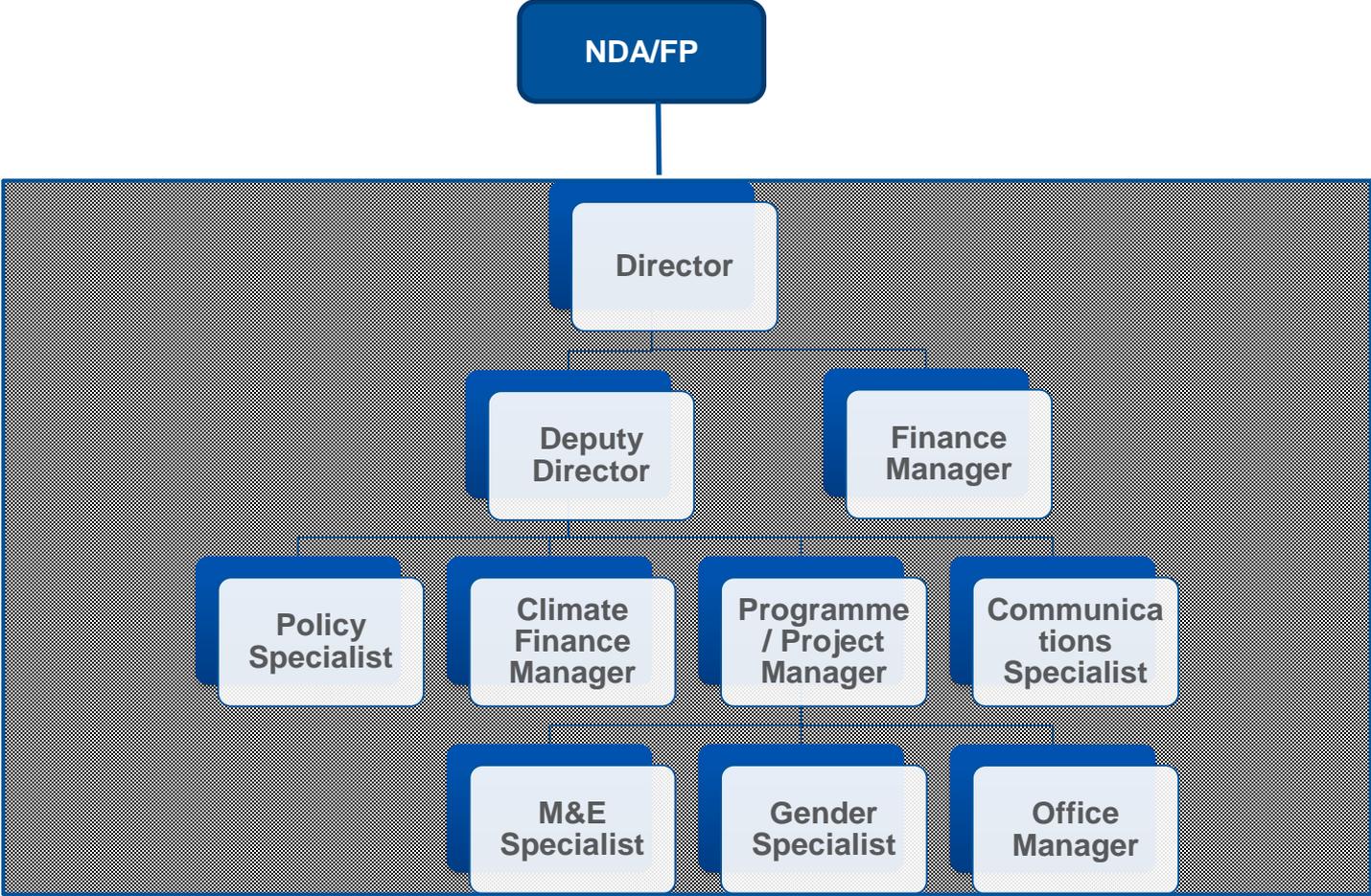


- The Climate Finance Coordination Mechanism (CFCM) is a system of stakeholders that support the development and implementation of climate projects in line with National sustainable development priorities.
- The Coordination Commission on Climate Change Problems (CCCCP) is the main inter-governmental coordination platform for climate change issues.
- The Climate Finance Center (CFC) established by **Gov. KR on 14 August 2017** as the lead institution in charge of climate finance-related matters.
- **The main role of the CFC:**
  - Assist the Government in attracting financial resources from climate funds and international organizations, and
  - Support the Government design and implementation of climate resilience investment projects and programmes.

# Working levels of an effective Climate Finance Coordination Mechanism



# Structure of the Kyrgyz Climate Finance Centre



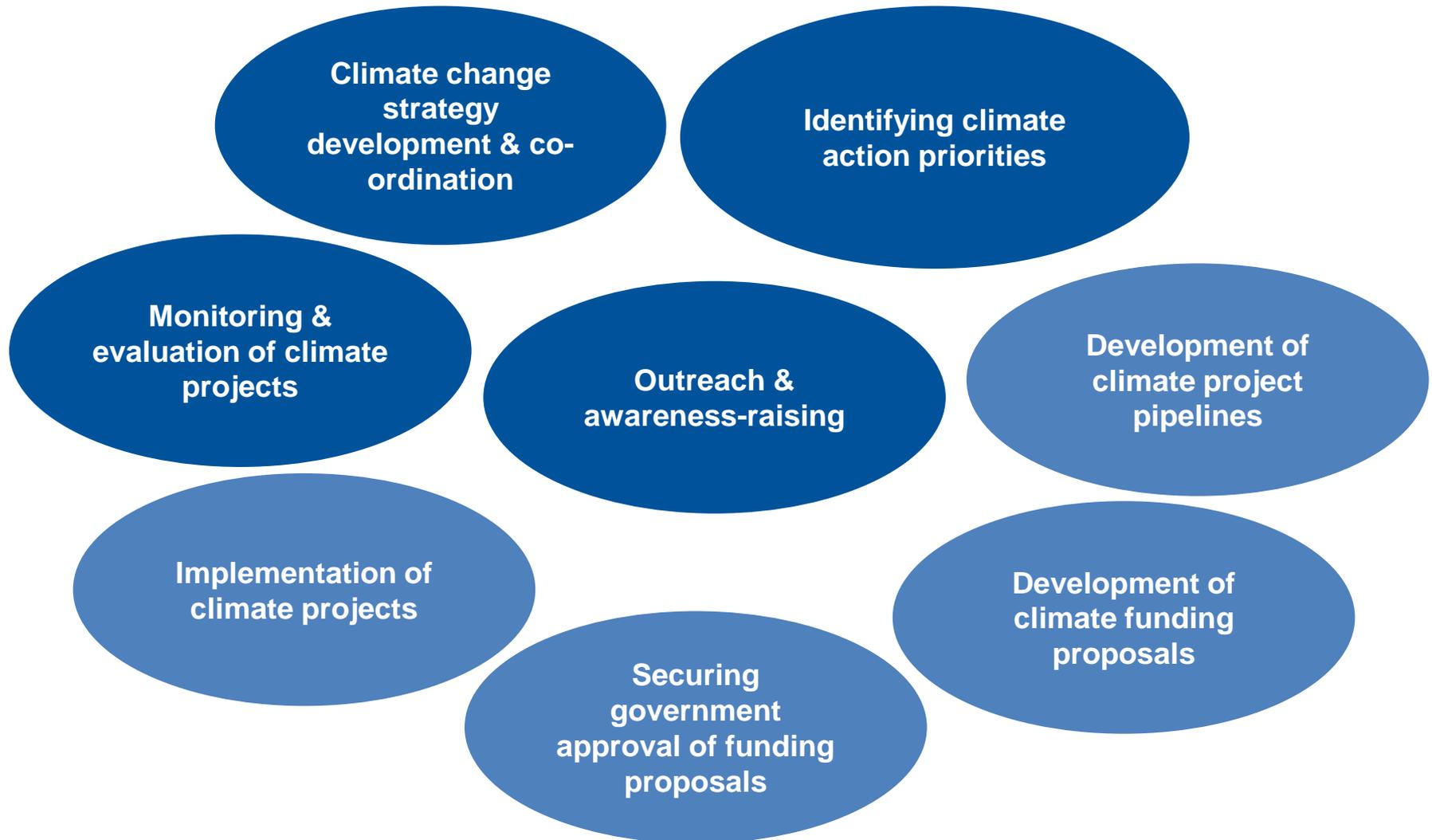


## Lessons learned

# Lessons learned: An effective climate finance management system is required



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# Lessons learned: Ensure country ownership of the CFCM



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for Reconstruction and Development

1. **The lead role in the CFCM should be assigned to a senior central ministry, with high convening power and capable of coordinating and driving forward the strategic investment programme.**
2. **The NDA/Focal Point should coordinate access to all sources of climate finance.** This improves efficiency and helps to identify opportunities for blending climate finance from climate funds, development partners and private sector investors.
3. **The institutional architecture for engaging with Climate Funds should be embedded in the national context** and build on existing functioning structures to ensure country ownership.



**Thank you for your attention!**

# Pilot Program for Climate Resilience (PPCR)



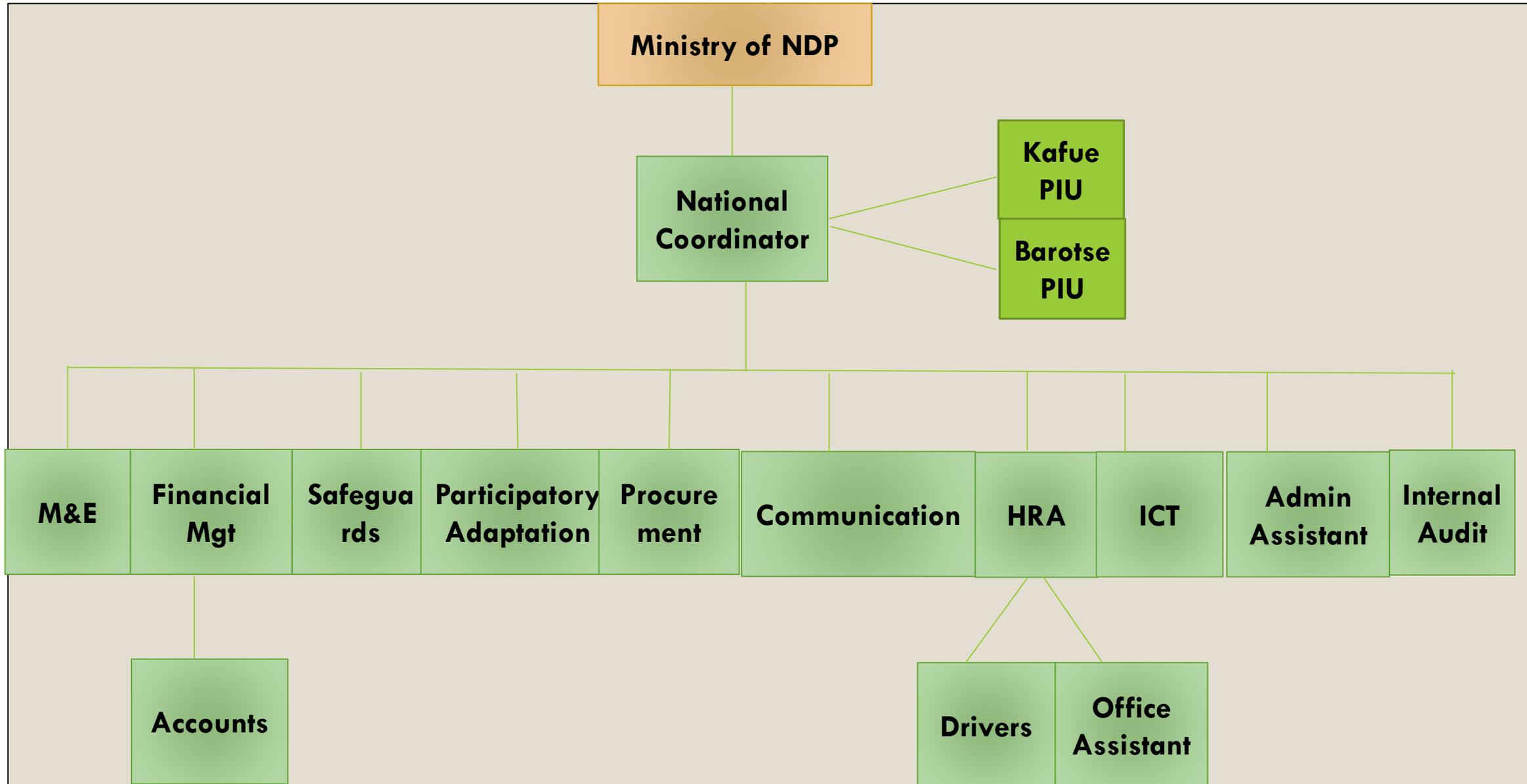
## **STRENGTHENING INSTITUTIONAL CAPACITY FOR CLIMATE FINANCING**

Presented at the PPCR Pilot Countries Meeting

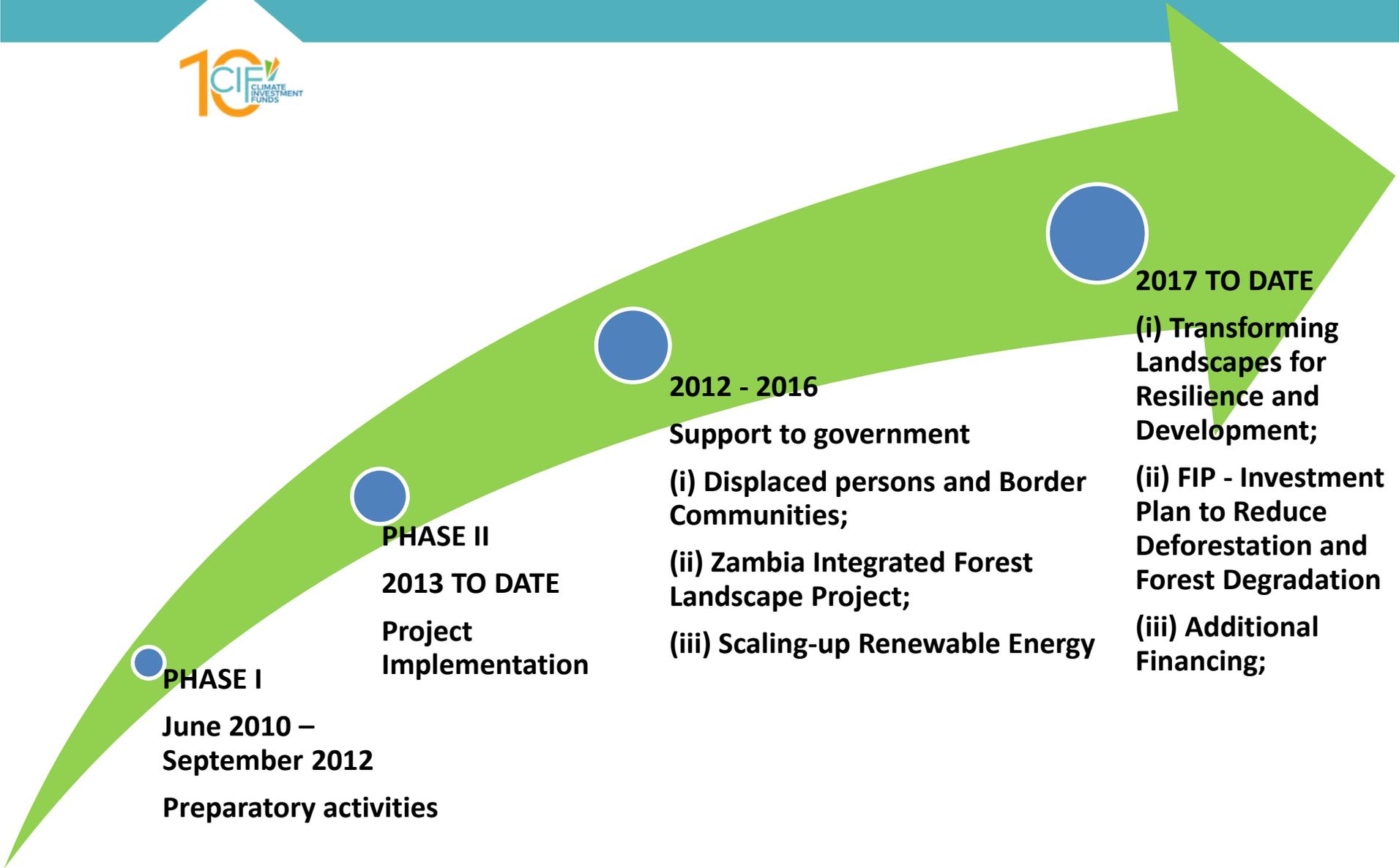
Manila, Philippines

22.05.2018

# ZAMBIA PPCR ORGANIZATIONAL SET-UP



# ZAMBIA PPCR/SPCR



# CLIMATE FINANCE ENVIRONMENT

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- Nationally Determined Contributions
- National Policy on Climate Change
- National Climate Change Response Strategy
- National REDD+ Strategy
- Investment Plan to Reduce Deforestation and Forest Degradation
- Report on the options of climate risk financing
- Zambia Vulnerability Assessment Reports (DMMU)
- Nationally Appropriate Mitigation Actions
- Economics of climate change report
- Technology needs assessment reports

# IDENTIFIED INSTITUTIONAL GAPS IN LINE MINISTRIES



ASPECT	DESIRED SCENARIO	IDENTIFIED GAP
Evidence supported costings	Cost of investments supported by research, projections	Absence of a platform for research-policy-implementation linkages
Guiding instruments NDC, NAPA, SDGs, NAMAs, NDPs	Translating the identified interventions into bankable proposals	Low ownership due to absence of mainstreamed sector plans
Investment plans	Breakdown of the national climate change instruments into costed actions	Absence of investment plan to support climate change resource needs
Financial fiduciary, safeguards, M&E, technical expertise	Internalized systems that respond to funders' requirements	Line ministries function along specific mandates related to the fields
Funding eligibility	Harmonization of national criteria to bilateral and multilateral sources e.g. GCF, AF.  Expand funding source landscape to south-south cooperation	Institutional set-up of line ministries not responsive to meet international requirements

# STRENGTHS BUILT THROUGH PPCR

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- i. Experience of coordinating or implementing climate change programmes and projects
- ii. Financial fiduciary capacity
- iii. Environmental and social safeguards;
- iv. Monitoring and Evaluation;
- v. Stakeholders' engagement;
- vi. Suite of technical expertise
- vii. Budget coding and tracking to ensure accountability for climate finance



# A Case of The Zambia Integrated Forest Landscape Project



# PROJECT DESIGN

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- **Defined the problem:** GHG emissions from deforestation and forest degradation;
- **Identified the root causes** of the problem: establish drivers of deforestation
- Described **the desired situation:** Theory of Change - support to local livelihoods for sustainable management of forests, land and wildlife habitats to reduce deforestation and forest degradation
- Identified the main **barriers/risks/challenges** to be overcome to reach the desired solution: land rights, complex ERPA concept, illegal settlements in target protected areas,
- Identified **key components** to drive the project: enabling environment, livelihood and low emission investments, project management

# PROJECT DESIGN

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- Stakeholder engagements: line ministries, ministry of finance, provincial authority, districts, site visits to communities;
- Preparation of environmental and social safeguards instruments for bank approval: ESMF, RPF, PF GRM;
- Joint appraisals between the World Bank and Government;
- Consultations on implementation/institutional arrangements

# KEY ATTRIBUTES

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## Aligned to:

- i. National Policy on Climate Change
  - ii. Nationally Determined Contribution e.g. **reducing emissions from land-use and land use change**
  - iii. National REDD+ strategy
  - iv. 7<sup>th</sup> National Development Plan e.g. **environmental and social sustainability outcome**
  - v. Funders' priority support areas
- **Initiative for Sustainable Forest Landscapes (ISFL) of the BioCarbon Fund**
  - **Strategic objectives of the Global Environment Facility (GEF)**
  - **World Bank's Country Partnership Strategy for Zambia**

# KEY ATTRIBUTES

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- i. Addressing rural poverty and improving livelihoods
- ii. Strong impact potential on climate change goals (mitigation, adaptation)
- iii. Role of private sector e.g. value chain for products arising from support to forest dependent communities (honey, edible oils)
- iv. Role of civil society organizations e.g. community mobilization
- v. Implementation arrangements clearly defining roles of relevant stakeholders and line ministries
- vi. Sustainability mechanisms

# CHALLENGES

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- No oversight on line ministries and national instruments to influence project identification;
- Weak ownership of project design processes by line ministries;
- Slow pace of mainstreaming sector plans (**work in progress**);
- Delayed coding of climate finance in the national budget (**work in progress**);
- No national definition of climate finance is to avoid double reporting
- Budget tracking by line ministry for climate finance allocation and spending in sectors (**work in progress**);
- Narrow domestic sources of climate finance (weak private sector involvement)
- No MRV system for climate finance in Zambia

*In Pursuit of*

***Matatag, Maginhawa at Panatag na Buhay***

# PROGRAM CONVERGENCE BUDGETING



Dir. Rolando U. Toledo

22 May 2018

# PRESENTATION OUTLINE

1. Program Budgeting
  - Rationale/Definition
  - Legal Bases
  - Timeline
  - Objectives
  - Uses
2. Roles (Lead and Participating Departments/Agencies)
3. Risk Resiliency Program (RRP)
  - Results
  - Challenges
  - Way Forward



# Program Convergence Budgeting

- Several government agencies work as one to meet common objectives, instead of competing for budgets
- Reinforces government's push for a more prudent and targeted spending by fostering collaboration among agencies (lead and participating) in planning, budgeting, and implementing priority programs and projects.

# Definition

## **PROGRAM CONVERGENCE BUDGETING** *Opening the "black box" of spending*



# Rationale

- Increase certainty of attaining Administration's long-term goal of achieving *matatag, maginhawa, at panatag na buhay*;
- Need to prioritize on the critical programs given the *limited fiscal space; and*
- Maximize the translation into direct and substantial benefits for the poor through *Program Convergence Budgeting Approach.*

# Legal Bases

- **Executive Order No. 43 s. 2011** – Pursuing our Social Contract with the Filipino People through the Reorganization of the Cabinet Clusters
- **National Budget Memorandum 114 s.2012** – Adoption of a Program Approach for the FY 2013 Budget Preparation
- **Executive Order No. 24 s. 2017** – Reorganizing the Cabinet Clusters System by Integrating Good Governance and Anti-Corruption in the Policy Frameworks of all Clusters and Creating the Infrastructure Cluster and Participatory Governance Cluster

# Program Convergence Budgeting



The budget strategy was consulted in different Cabinet Clusters under E.O. No. 43

The policy on adopting a program approach for the FY 2013 Budget Preparation was embodied in National Budget Memorandum 114.

Program Convergence Budgeting was adopted by DBM

Program Convergence Budget was published for the first time in the BESF

E.O. No. 24 provided an opportunity to review the existing policy on PCB

2011

2012

2013

2014

2017



# Objectives of Program Budgeting

- To better ensure the accomplishment of key outputs and outcomes of the President's ***0+10-Point Socio-Economic Agenda***
- To further drive the focus on priority programs and results:
  - in the allocation of resources
  - in the coordination of agency efforts

# Uses of Program Budgeting



- As a tool of policy analysis;
- As a means of improving government performance;
- It facilitates accounting for the cost of government activities; and
- It enables the government to plan ahead and set spending priorities.

# Issues/Challenges Prior to Program Convergence Budgeting



- Lack of complementation in programs and projects between/among **national government agencies**, as well as with those of **local government units**, which led to poor alignment of funds for priorities
- No formal mechanism for participation of stakeholders (including private sector) in planning and budgeting
- Gaps and inefficiencies in the delivery of much-needed services

# Issues/Challenges Prior to Program Convergence Budgeting



## Challenges

- To adopt a holistic approach in allocating budget for priority programs and ensure that participating agencies propose projects only within their ambit, to avoid duplication
- To ensure that key participating agencies of priority programs coordinate and synergize their proposed budgets and targets to achieve targeted outcomes

# Roles of the Lead and Participating Departments/ Agencies





## Lead Department/Agencies shall:

- Convene all the participating agencies to conduct a consistency check on assumptions, targets, beneficiaries, focus areas, and implementation timelines and resources.
- Consolidate the targets and funding requirements of identified programs for submission to DBM.

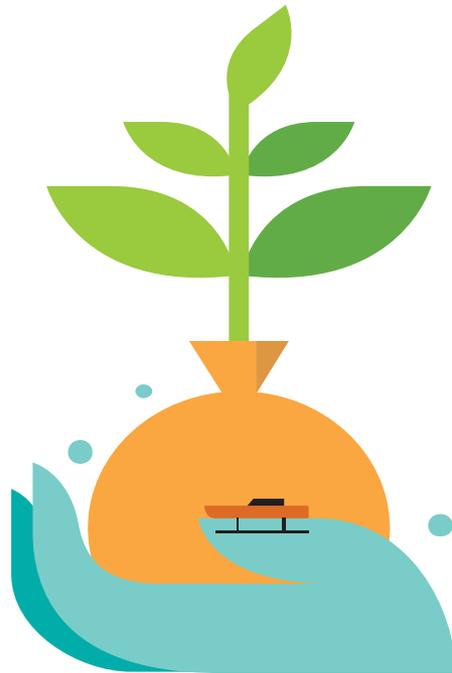
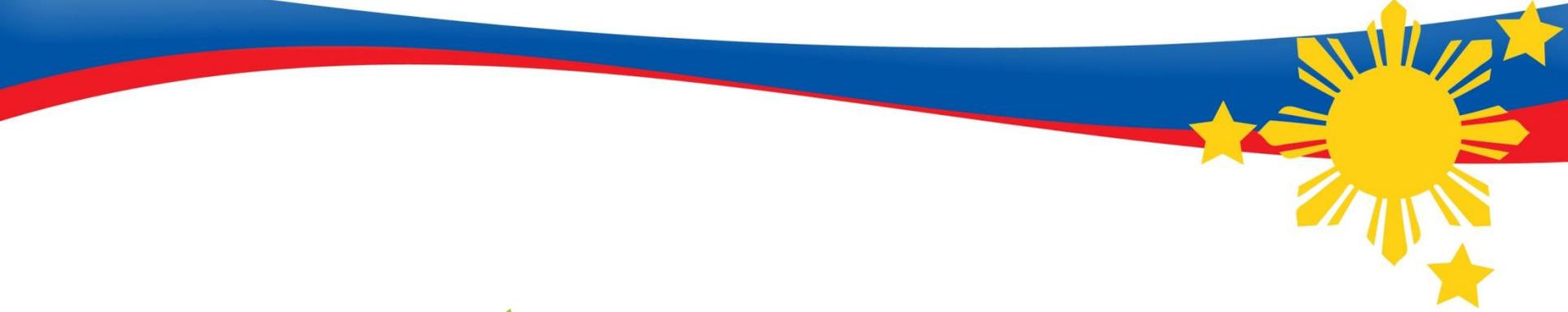
# Participating Departments/Agencies shall:

- Actively participate in the meetings called by the lead department/agency as well as in the DBM Technical Budget Hearings
- Refocus their budget proposals previously submitted to consider the focus geographical areas identified

# Participating Departments/Agencies shall:



- Submit to the lead department/agency *their assumptions/criteria for prioritization, targets, beneficiaries, focus areas, implementation timelines and resources* corresponding to their contribution to the program using the following forms:
  - BP Form 202-A (Convergence Programs and Projects); and
  - BP Forms 202 and 203 of (Proposal for New or Expanded Projects)



*Risk Resiliency  
Program (RRP)*



# Risk Resiliency Program

**Sector Issues:** The Philippines will continue to face significant impacts from climate change:

- Ranked 5<sup>th</sup> most affected from 1994-2013 in terms of long-term climate risk index ;
- Ranked 1<sup>st</sup> in the list of countries most affected by extreme weather events;
- Sea level rise is an even larger threat to the Philippine coastline compared to other countries in the region

# Risk Resiliency Program



## *Strategies:*

- Define cross-cutting policies to address climate change;
- Implement climate actions under the National Climate Change Action Plan;
- Establish the readiness for the entire climate agenda and improving climate knowledge to aid decision making processes;
- Prioritize adaptation while establishing the enabling environment for the private sector to optimize climate change mitigation opportunities;

# Risk Resiliency Program



## *Strategies:*

- Enact complementary sectoral policies and programs;
- Promote energy efficiency and renewable energy standards to deepen the climate response;
- Strengthen the resilience of natural systems and urban built environment with focus on the 18 major river basins and principal river basins.

# Risk Resiliency Program



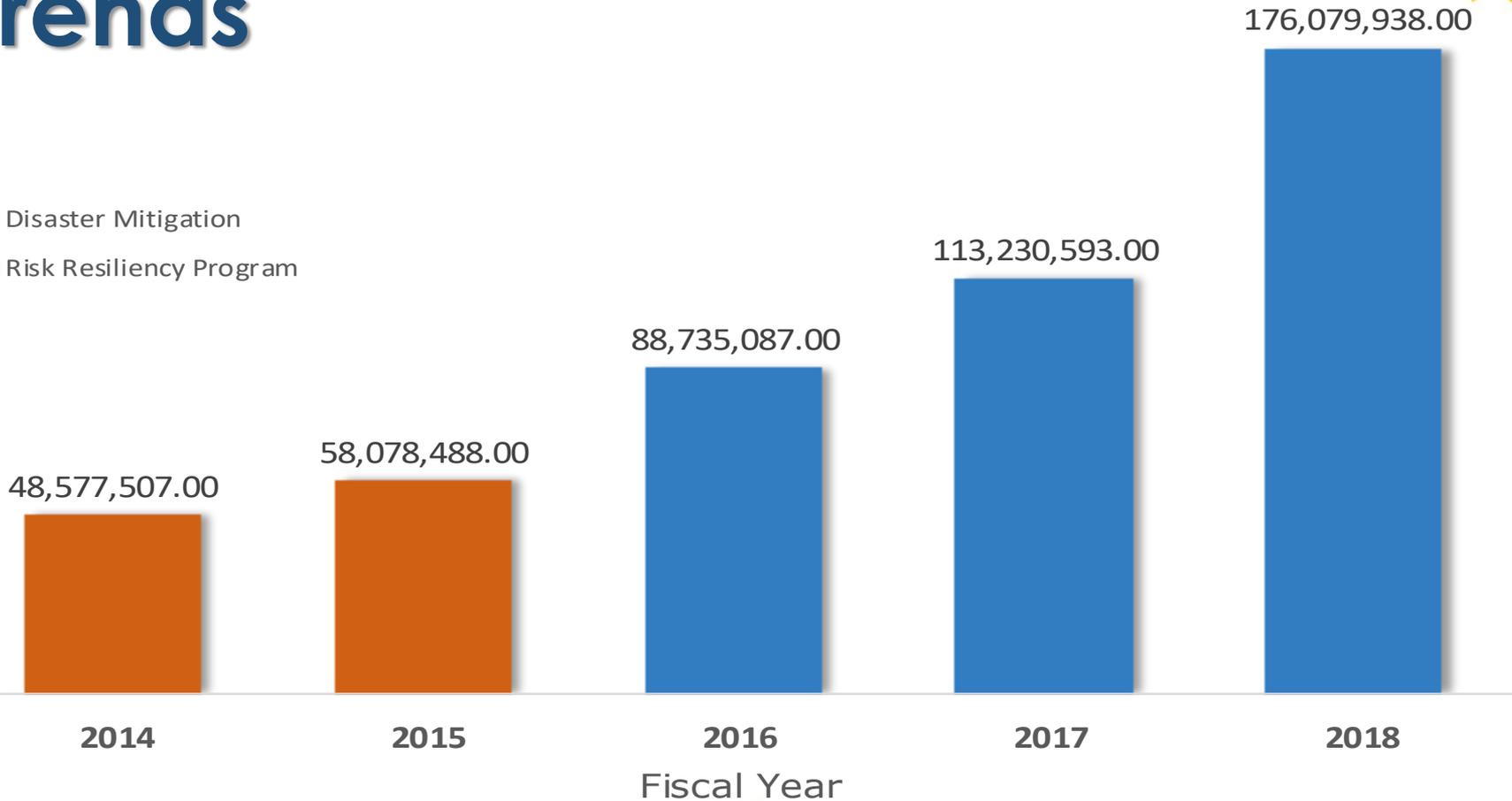
## *Programs and Project*

The Government identified key climate actions that contributes to the broad development goals. The FY 2018 Budget prioritizes precautionary and adaptation measures as well as disaster risk reduction activities:

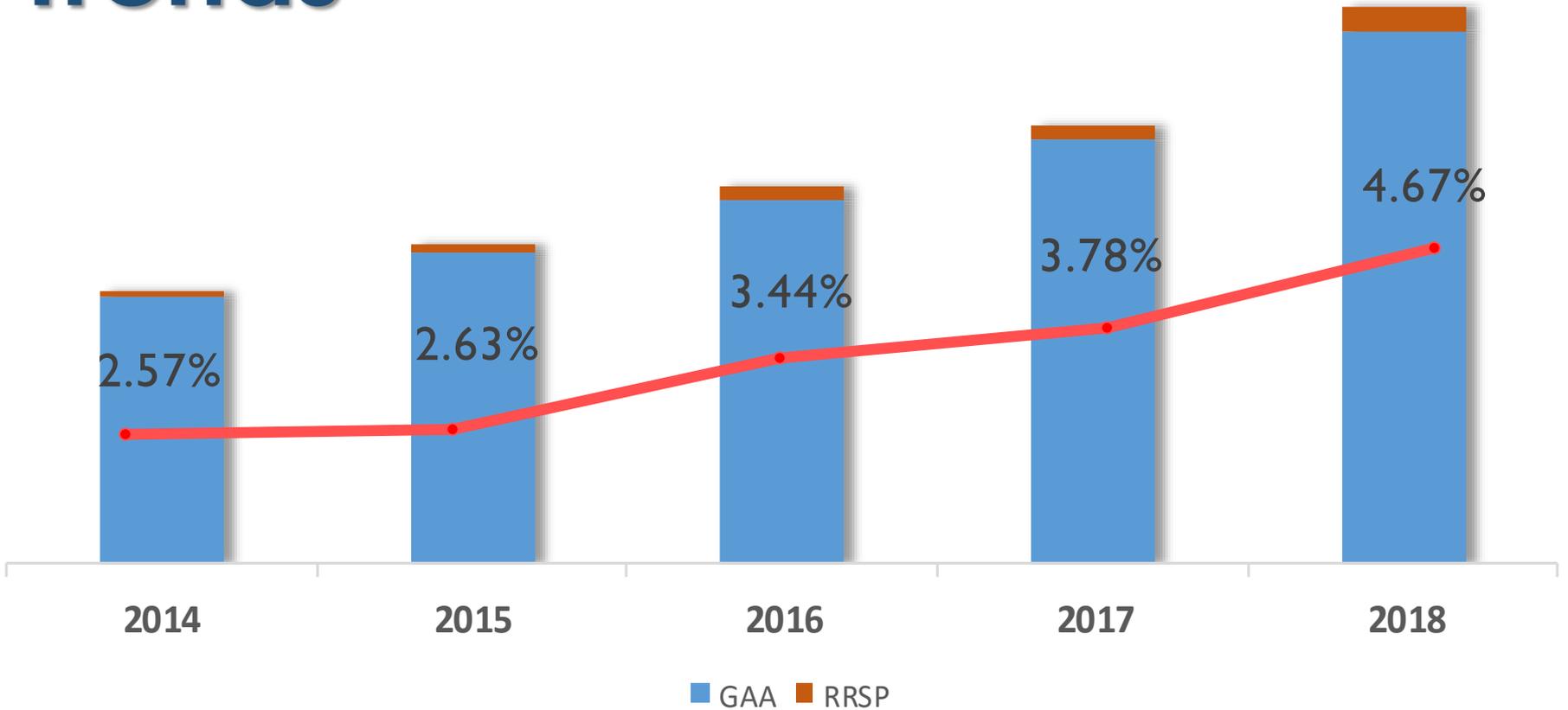
1. National Greening Program (DENR)
2. Flood mitigation and drainage projects (DPWH)
3. Rain water harvesting and water supply (DPWH)
4. Financing climate resilient farming/fishing practices and technologies, including Agricultural Insurance Programs (DA)
5. Community-based/Localized Early Warning System (DOST)
6. Integrity of the Environment and Climate Change Adaptation and Mitigation (DENR-EMB) – on solid waste, air quality, water quality, and hazardous waste management
7. Energy Efficiency (DOE)

# RRP Expenditure Trends

- Disaster Mitigation
- Risk Resiliency Program



# RRP Expenditure Trends

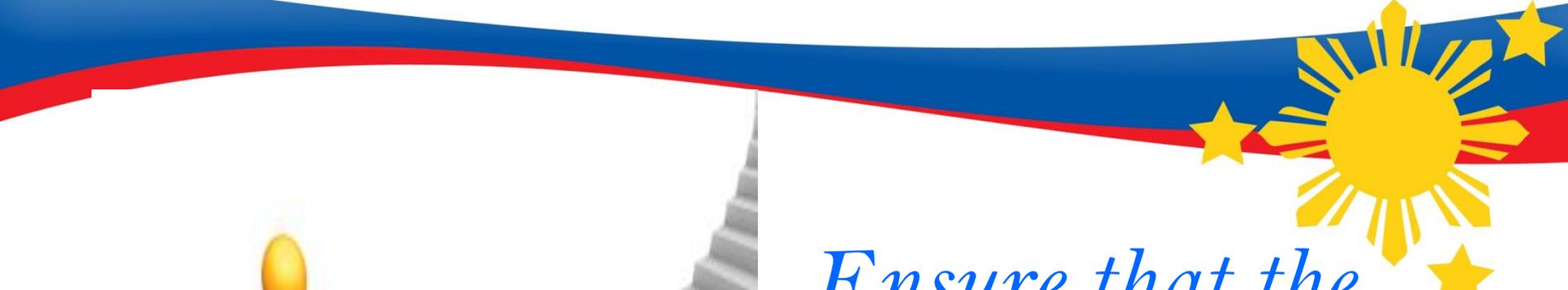




# Issues and Challenges

- Inclusion of Disaster Risk Reduction
- Monitoring and Evaluation Scheme to be implemented – what are the indicators to use?
- Convergence throughout the implementation of projects (not just in Planning and Budgeting)

**WHAT'S**  
**NEXT STEP** **YOUR** **?**



*Ensure that the  
Program  
Convergence  
Budgeting approach  
is sustained during  
program  
implementation*





- Revisit and incorporate the Master Plan for each program to the Philippine Development Plan  
*(e.g., CCAM-DRR Roadmap )*



- Coordinate the activities of the different programs to ensure the timely delivery of services needed to the focus geographical areas *(integrated approach or sequencing of interventions, e.g., Infrastructure, Transportation, Education, Health, Enterprises )*



- Secure active participation of the Regional Offices of lead and participating departments/ agencies in budget planning, execution and monitoring of priority programs



- Conduct periodic evaluation to gather best practices among the different convergence programs to further improve the policy and implementation of Program Convergence Budgeting



- Issue the Joint Memorandum Circular and Guidance Document for the Risk Resiliency Program



THANK  
YOU!



# Session 3.2. Climate Finance: Going Beyond Public Sector Financing of Climate Change Resilience: Constraints and Opportunities

CRISANTO S. FRIANEZA

Secretary General

Philippine Chamber of Commerce and Industry





# PCCI VISION AND MISSION

## BUILDING GLOBALLY-COMPETITIVE ENTERPRISES



# PCCI Network

- **1,600 Corporate Members**
- **35,000 SMEs in 5 Geographical Areas**
- **120 Local Chambers**
- **115 Industry Associations**
- **42 bilateral Business Councils**



North Luzon

South Luzon

NCR

Visayas

Mindanao



# IMPACT OF CLIMATE CHANGE ON COMMERCE AND INDUSTRY

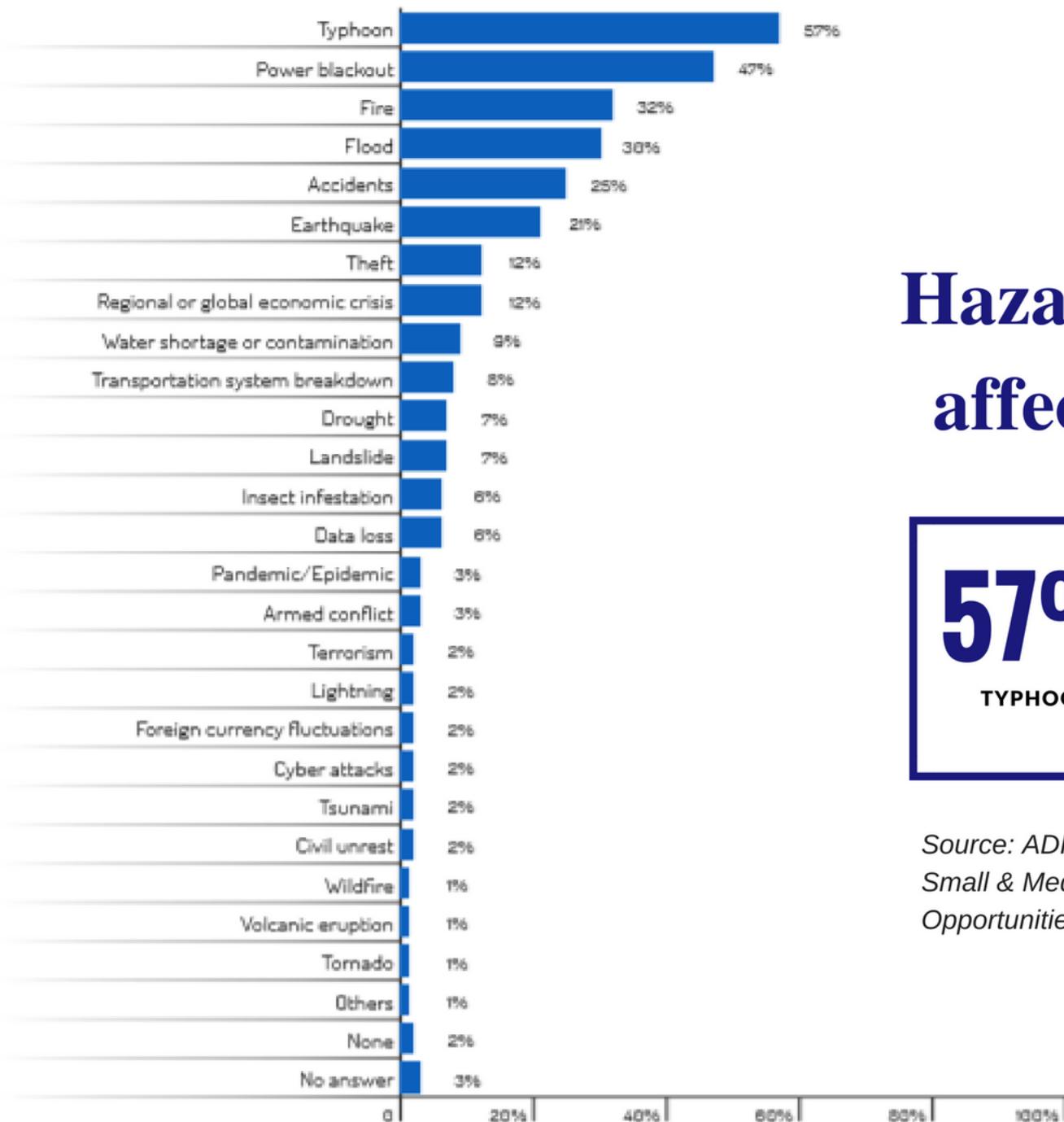
- Stoppages
- Interruption in the supply chain
- Damage to facilities & equipment
- Damage to raw materials & finished products
- Suppliers unable to deliver materials & services



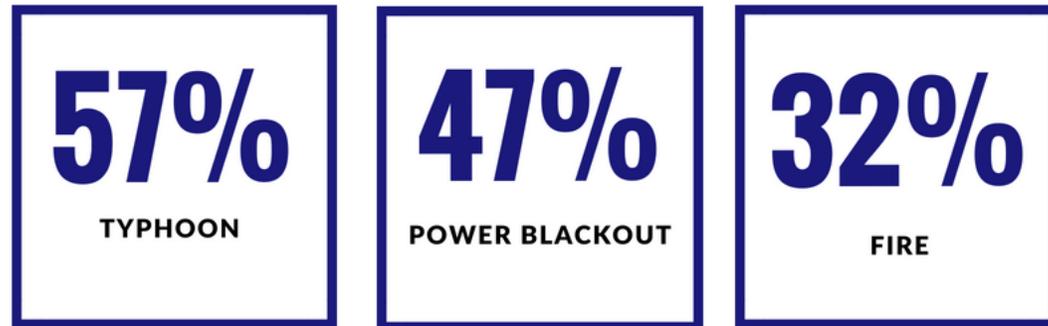
# IMPACT OF CLIMATE CHANGE ON COMMERCE AND INDUSTRY

- **Manufacturing/Retail:** disruption in one place complicate supply chain
- **Insurance:** premiums affected by droughts and hurricanes
- **Health:** availability of clean water & food; increased vulnerability to diseases
- **Engineering:** systems have to be adapted to weather changes
- **Workforce/Skills:** retooling needed i.e. planning production around potentially volatile weather phenomena

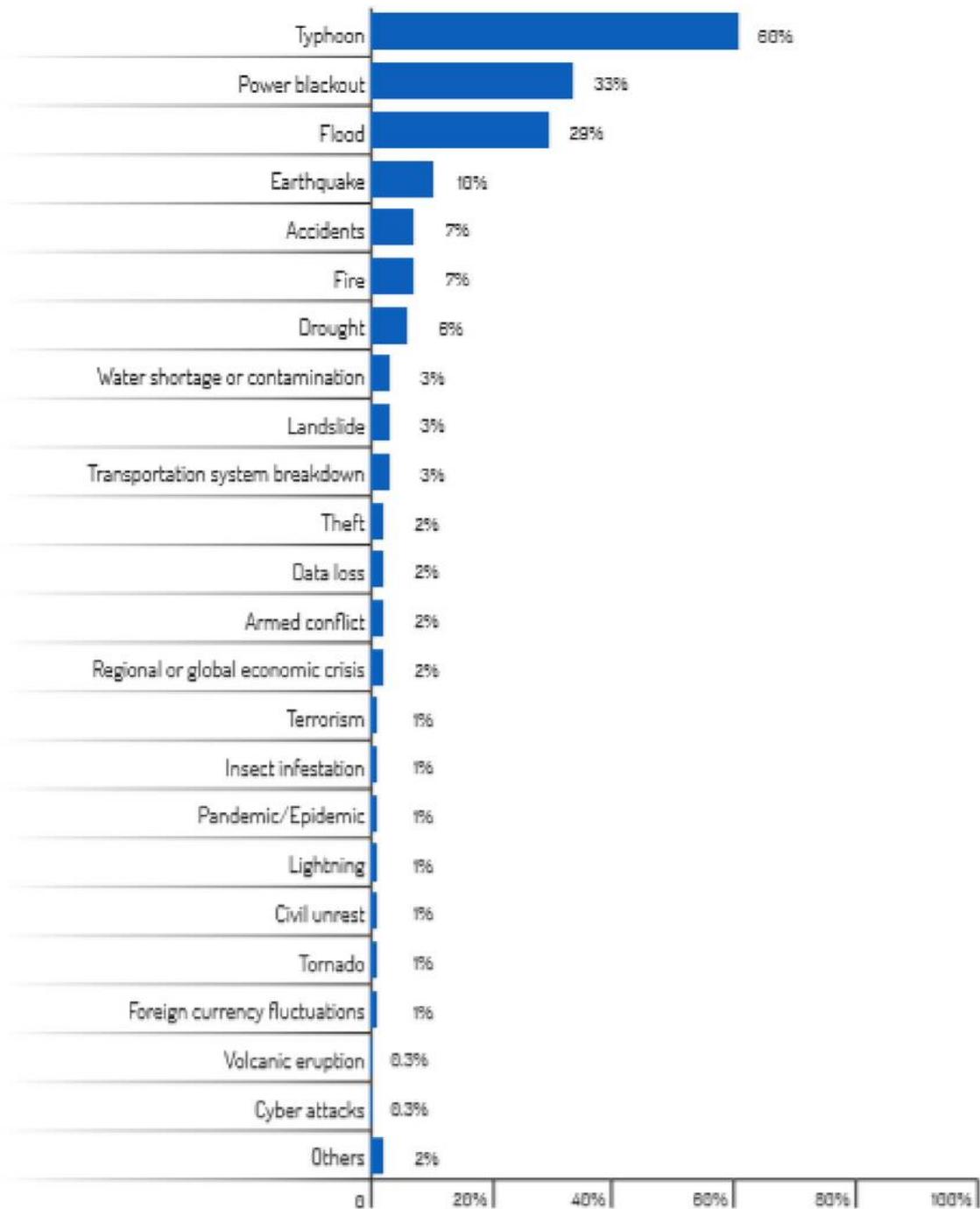




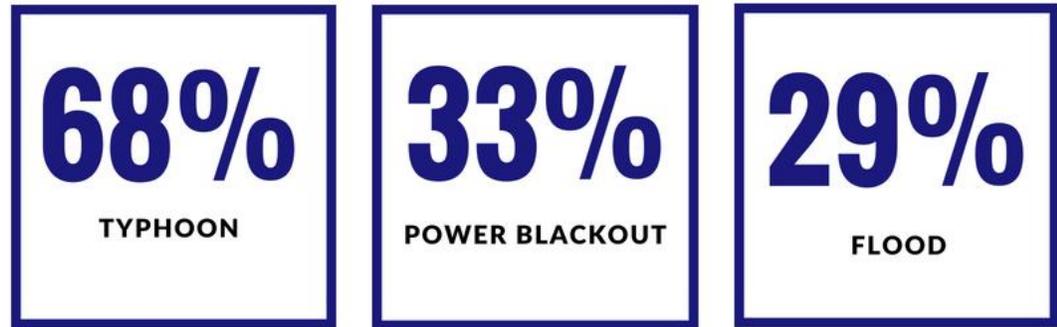
## Hazards that can potentially affect business operations



Source: ADPC. (2017). *Strengthening Disaster and Climate Resilience of Small & Medium Enterprises in Asia: Enabling Environment & Opportunities*

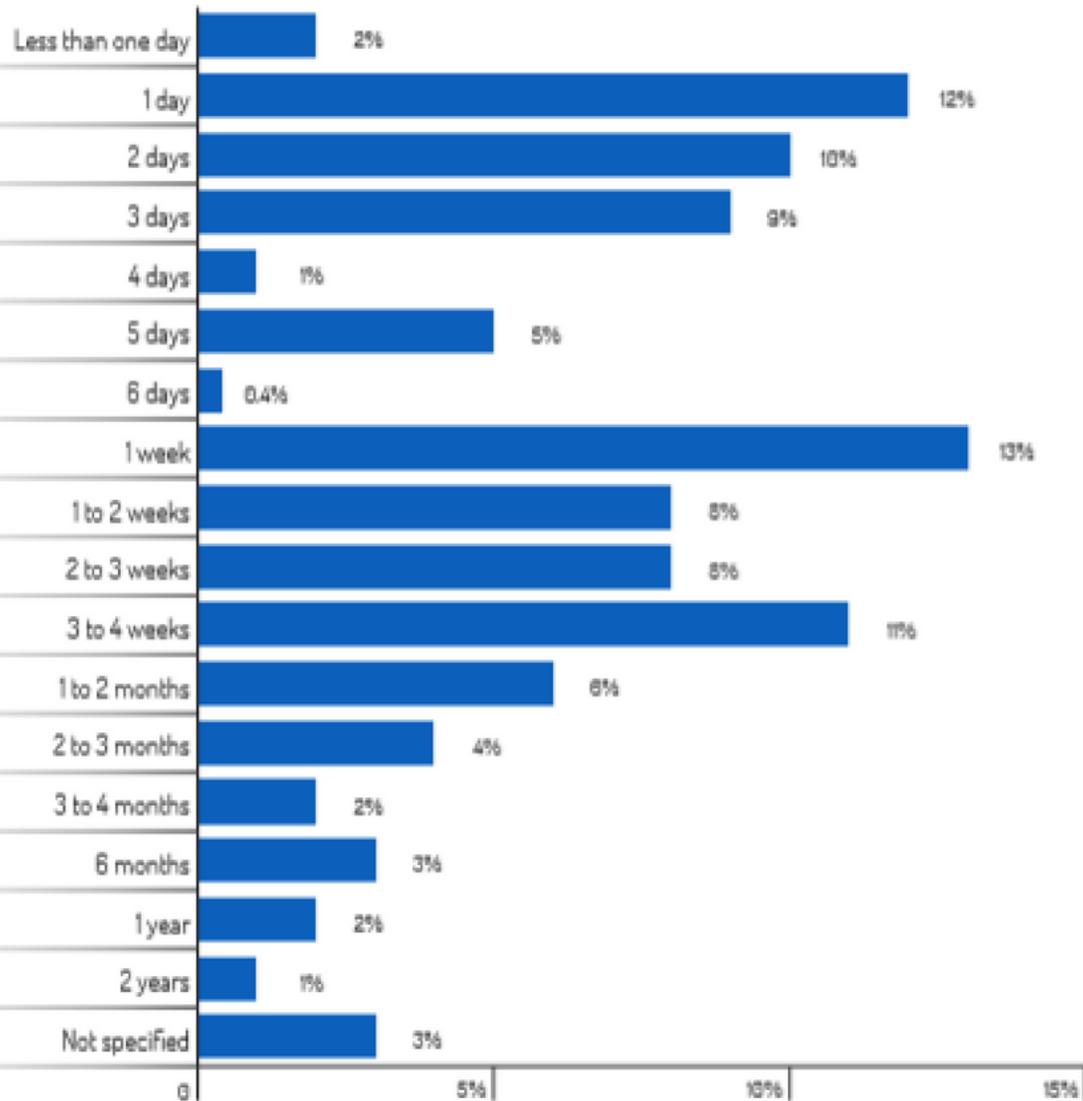


## Hazard that caused the disruption experienced by survey respondents



Source: ADPC. (2017). *Strengthening Disaster and Climate Resilience of Small & Medium Enterprises in Asia: Enabling Environment & Opportunities*

# Period business operations stopped due to the disruption



**13%**

**1 WEEK**

**12%**

**1 DAY**

**11%**

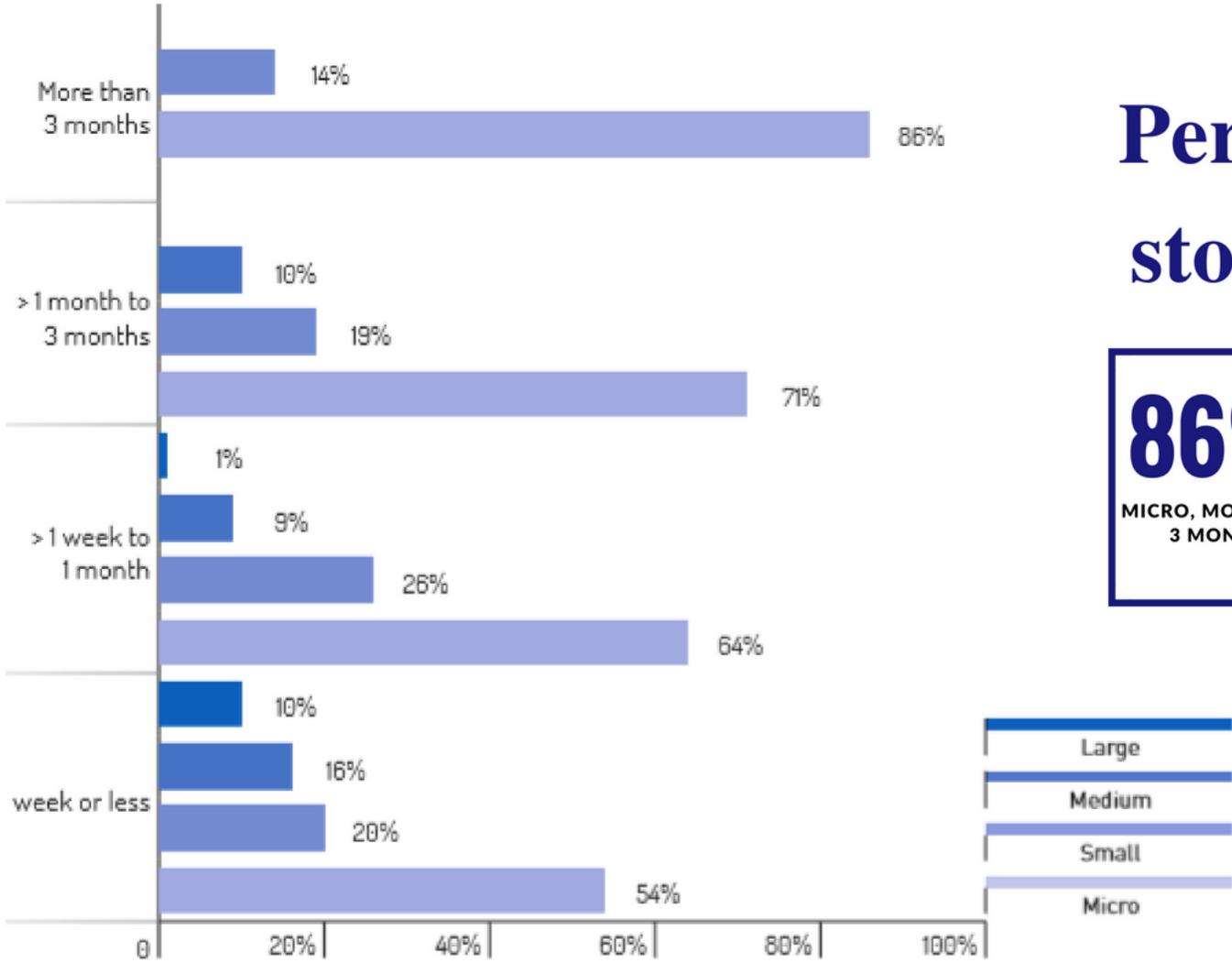
**3-4 WEEKS**

Source: ADPC. (2017). *Strengthening Disaster and Climate Resilience of Small & Medium Enterprises in Asia: Enabling Environment & Opportunities*



Philippine Chamber of  
Commerce and Industry  
Voice of Business

# Period of business operation stoppage by enterprise size



Source: ADPC. (2017). *Strengthening Disaster and Climate Resilience of Small & Medium Enterprises in Asia: Enabling Environment & Opportunities*

# Industry distribution of business operations that stopped for more than one month



**55%**  
MANUFACTURING

**14%**  
WHOLESALE &  
RETAIL TRADE

**14%**  
AGRICULTURE,  
FORESTRY, &  
FISHERY

Source: ADPC. (2017). *Strengthening Disaster and Climate Resilience of Small & Medium Enterprises in Asia: Enabling Environment & Opportunities*

# THE CHAMBER OF COMMERCE PERSPECTIVE: BOTH A THREAT AND AN OPPORTUNITY

## THREATS:

Climate change threatens supply chains, customers' businesses and communities businesses operate in

Exacerbated by:

- corruption
- excessive red tape stifle investments in RE & climate friendly investments
- subsidies that keep fuel prices artificially low



# THE CHAMBER OF COMMERCE PERSPECTIVE: BOTH A THREAT AND AN OPPORTUNITY

## OPPORTUNITIES:

- **Changes in consumer demand:** water management products and equipment; clothing for extreme weather conditions, RE generation
- **Agriculture diversification:** diversify into other crops not currently grown; land for business activities
- **Tourism:** warmer summers can extend tourist season; more investments in indoor facilities
- **Construction standards:** systems adapt to climate change; repair, maintenance or clean up products, new construction products and services
- **Push for reforms**



## Estimates of potential additional sustainability-related business opportunities by 2050

SECTORS	Annual value in 2050 (US\$ trillion at constant 2008 prices: mid-points with ranges shown in brackets)	% of projected world GDP in 2050
Energy	2.0 (1.0 - 3.0)	1.0 (0.5 – 1.5)
Forestry	0.2 (0.1 - 0.3)	0.1 (0.05 – 0.15)
Agriculture and food	1.2 (0.6 - 1.8)	0.6 (0.3 – 0.9)
Water	0.2 (0.1 - 0.3)	0.1 (0.05 – 0.15)
Metals	0.5 (0.2 - 0.7)	0.2 (0.1-0.3)
<b>Total: Natural resources</b>	<b>4.1 (2.0 - 6.1)</b>	<b>2.0 (1.0 – 3.0)</b>
Health and education	2.1 (0.8 - 3.5)	1.0 (0.5 – 1.5)
<b>Total</b>	<b>6.2 (2.8 – 9.6)</b>	<b>3.0 (1.5 – 4.5)</b>

Source: World Business Council for Sustainable Development, *Vision 2050: The New Agenda for Business* (Geneva, 2010).



## Emerging markets for biodiversity and ecosystem services

Market Opportunities	Market Size (US\$ per annum)		
	2008	Estimated 2020	Estimated 2050
Certified agricultural products (organic, conservation grade)	\$40 billion (2.5% of global food and beverage market)	\$210 billion	\$900 billion
Certifies forest products (FSC, PEFC)	\$5 billion of FSC-certified products	\$15 billion	\$50 billion
Bio-carbon or forest offsets (CDM, VCS, REDD+)	\$21 million (2006 data)	\$10+ billion	\$10+ billion

Source: World Business Council for Sustainable Development, *Vision 2050: The New Agenda for Business* (Geneva, 2010).



# WHAT THE CHAMBERS CAN DO

- Sharing of best practices and capacity-building among members
- Facilitate access to technology and know-how
- Disseminate knowledge on disaster risk and resilience
- Identify challenges and opportunities for data-sharing.
- Implement capacity-building programs on climate resilience, disaster risk reduction
- Advocate policies and strategies on resource efficiency, environmentally sound technologies, agricultural productivity, sustainable agriculture, food security, and prevention of degradation of the ecosystem.



# WHAT THE CHAMBERS CAN DO

## USE NETWORKS

- Source new technologies, skills etc
- Conduct of trade missions, bilateral business meetings, one-on-one business matching sessions
- Framework of trade, free trade agreements, etc.



# PCCI EXCELLENCE IN ECOLOGY AND ECONOMY (E<sub>3</sub>) AWARDS

## To recognize companies:

- That have demonstrated innovative programs and outstanding environmental performance.
- Which have shown that improving environmental performance translates to more business opportunities and sustainability.

**The award highlights the innovative and outstanding environmental practices of companies which shall serve as model or an inspiration for others to follow or replicate**



# EXCELLENCE IN ECOLOGY AND ECONOMY (E<sub>3</sub>) AWARDS

## SMALL ENTERPRISE CATEGORY: PEÑALOSA FARMS

### INITIATIVES

- Windmill for Water
- Zero chemical fertilizer/ zero chemical pesticides
- Use of solid waste as compost

### IMPACT

- No Co<sub>2</sub> Emission, methane used for composting & biogas
- Reduced 4500 bags of chemical fertilizer & 500 gals of chemical pesticides
- 0.9M kg of poultry waste & 3.65M kg of swine waste recycled;

### SAVINGS

- Php 500,000 per annum
- Php 3.6 M of chemical fertilizer and P.5 M of chemical pesticides
- Php 9M per annum



# EXCELLENCE IN ECOLOGY AND ECONOMY (E<sub>3</sub>) AWARDS

## MEDIUM ENTERPRISE CATEGORY: SUNLIGHT FOODS CORPORATION

### INITIATIVES

- Use of 1 unit 1.1 kW evaporative air cooler instead of 4 units
- Use of narrower tubers
- Adopt Unilever Sustainable Agriculture Code

### IMPACT

- Reduction of electrical power consumption by 4.86 kw per hr.
- Reduce water consumption from 18 to 5 liters/kg output
- Covered 135 farmers under the farming program; Sustainable source of raw material

### SAVINGS

- Php 120, 597.12 per annum
- Php 339, 300.00 (for 580,000 kg of products produced)



# EXCELLENCE IN ECOLOGY AND ECONOMY (E<sub>3</sub>) AWARDS

## LARGE ENTERPRISE CATEGORY: SUNPOWER PHILS., MFG. LTD.

### INITIATIVES

- Green purchasing, i.e. Led light and energy star laptops
- Reminder to switch off aircon at canteen
- Recycling of blowdown discharge

### IMPACT

- 31,396kWh/qtr
- Ave. 104722kWh/mo.
- 35 m<sup>3</sup>/day

### SAVINGS

- Php 550, 916 per annum
- Php 1,843,104 per annum
- Php 103,040 per annum



# EXCELLENCE IN ECOLOGY AND ECONOMY (E<sub>3</sub>) AWARDS

## LARGE ENTERPRISE CATEGORY: THE MANOR AT CAMP JOHN HAY

### INITIATIVES

- Replace CFL bulbs with LED lights; Use of energy cards in all rooms
- U-shaped structure of the hotel
- Waste water used as golf course irrigation

### IMPACT

- GHG reduction, reduce power consumption, lower electric bills
- Reduce power consumption
- Water savings of 68,996 cu.m.

### SAVINGS

- Php 8,739,398.95 for 3 years
- Php 6,817,872.02 for 3 years
- Php 5,248, 313.00 for 3 years



# EXCELLENCE IN ECOLOGY AND ECONOMY (E<sub>3</sub>) AWARDS

## LARGE ENTERPRISE CATEGORY: KNOWLES ELECTRONICS PHILS. CORP.

### INITIATIVES

- Shift to geothermal energy
- LED Bulb Conversion at Production Areas
- Rainwater Harvesting at back gate guard house

### IMPACT

- Eliminate GHG Emissions equivalent to 1,100 tons/mo.
- Eliminate the use of mercury-containing bulbs
- Mitigate depletion of aquifers

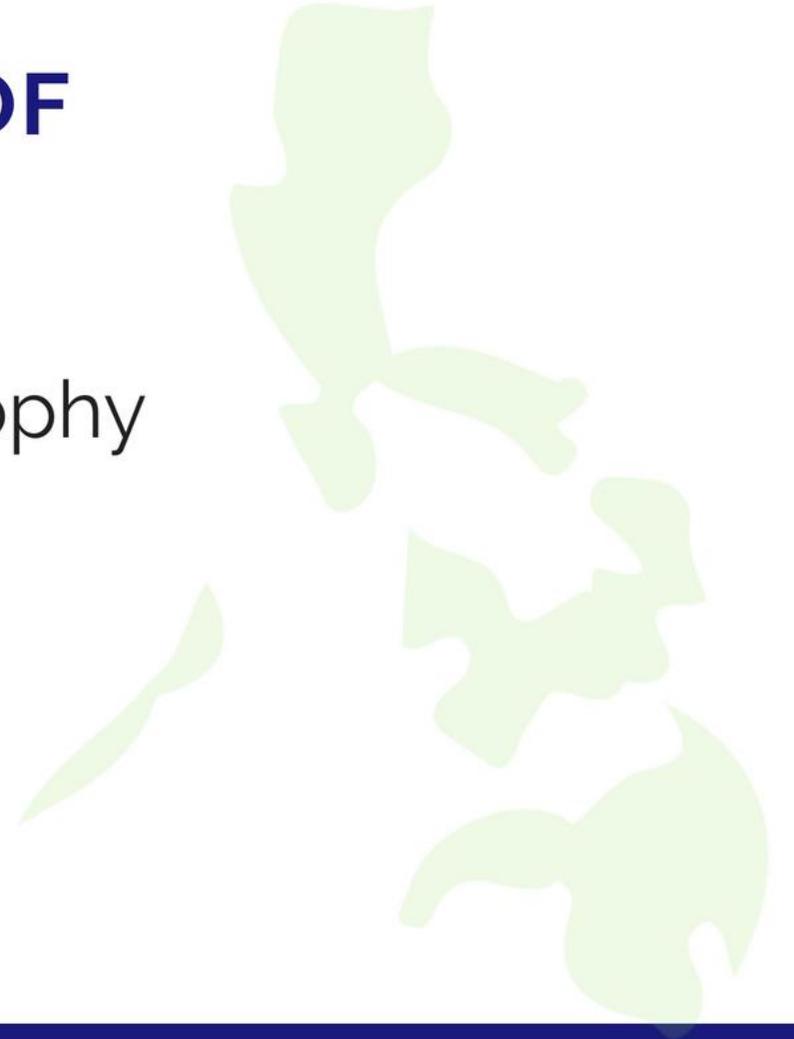
### SAVINGS

- Php 500,000 per month
- Php 200,000 per month
- Php 200,000 per month



# **GREEN PHILIPPINES ISLANDS OF SUSTAINABILITY (GPIOS)**

Premised on the triple bottom philosophy of balanced social, economic and environmental benefits



# GPIOS EcoProfit Programmes

- **ECOBONUS Programme:** 5-6 days direct consulting and 6-9 workshops on cleaner production, environmental policy, waste management, ecological purchasing and handling of hazardous materials, eco-controlling and eco-indicators, environmental reporting and project management, PR & marketing
- **ECOFOCUS Programme:** 3-5 days direct consulting and 3-4 workshops on Energy Conservation, waste management, and material flow analysis
- **ECOSENSE Programme:** 1-day seminar and workshop on tools and measures to adopt to enhance environmental programs and activities



# GPIOS ACCOMPLISHMENTS

- Around 250 companies benefitted since its inception in 2009

ITEM	ACTUAL SAVINGS	%SAVINGS	AMOUNT SAVED (PHP)
Electricity	8,907,445 Kilowatt Hour	7%	80,185,117
Fuel	877,852 Liter	13%	24,020,075
Hazardous Waste	15,277 Kilogram	63%	1,045,213
Solid Waste	315,464 Kilogram	76%	29,525,153
Water	640,662 Cubic Meter	39%	9,066,215
<b>TOTAL</b>			<b>143,841,776</b>

- ROI = .08 with a payback period of 9.6 months
- Total energy savings can light up 47,367 street lamps for one whole year, 12 hrs/day
- The amount of water savings can fill 256 Olympic sized pools
- The amount of waste avoided can fill up to 23 garbage trucks



# BENEFITS

## Profit - Financial Benefits

- Reduced production / maintenance cost
- Improved energy efficiency
- Optimized resource utilization
- Substantial financial savings

## Planet - Improved Environmental Performance

- Better waste management
- Improved environmental performance
- Reduced air emission
- Complementary to ISO 14001 and other environmental standards

## People - Social Benefits

- Better working conditions
- Better cooperation with authorities
- Enhanced image
- Better legal compliance
- ECOSWITCH Certification
- Safeguarding of jobs and labor through successful performing companies



# BUSINESS RESILIENCE CENTER PROGRAM

## Objectives:

- 1) Increase awareness/practical knowledge on business/organizational resilience in general and, specifically, on business continuity management/planning (BCM/BCP) among MSME owners/management through the conduct of simplified BCM/BCP seminars/workshops.
- 2) Increase the adoption of institutional regulatory support/ordinances at the local government unit (LGU) level to provide fiscal and non-fiscal incentives to encourage a greater number of MSMEs to voluntarily accomplish the Business Continuity Roadmap for their businesses.
- 3) Develop incentives for LGU's, through the National Competitiveness Council (NCC) Cities and Municipalities Competitiveness Index (CMCI) and the Department of Interior and Local Government's (DILG) Seal of Good Local Governance (SGLG), to promote increased voluntary accomplishment of the Business Continuity Roadmap by MSMEs in their respective jurisdictions.



# THE FINANCING OF ADAPTATION MEASURES

- Government can provide financing to jumpstart growth and leverage private funds
- Public-Private Partnerships
- Downward trends in the price of eco-friendly technologies encourage investments in climate-smart technologies



## Sustainability indices show that investments in environmentally sustainable sectors can be financially rewarding.

Examples:

- **HSBC Global Climate Change Benchmark Index:** track stock market performances of companies best-placed to profit from the challenges of climate change
- **Standard & Poor's / IFC Carbon Efficient Index:** measures performances of selected emerging markets with lower



# CLIMATE CHANGE ADAPTION IS A PARTNERSHIP

- PPP is not all about big ticket infrastructure projects.
- It is about government and the business sector working together to create an environment conducive to business growth.
  - Identify and remove constraints to investments in climate-smart technologies makes financial sense
  - Factoring of climate resilience and disaster resilience in SME development policies:
    - A. Technical assistance, consultancy service or training in BCP preparation
    - B. Certification schemes (certified SMEs will be preferred suppliers)
    - C. Legislation, policies & institutional arrangements that encourage SME participation
    - D. Awards & recognition for disaster resilient SMEs



# CLIMATE CHANGE ADAPTION IS A PARTNERSHIP

- Develop skill in government to implement required systems policies
- Enhance national statistical systems to provide timely and reliable disaggregated data for users
- Enhance capacity of government to use data for evidence-based policy-making for monitoring and review
- Encourage firms to retool operations and maximize opportunities in a green economy
- Develop skills of workforce in green jobs



# CLIMATE CHANGE MITIGATION AND ADAPTATION RELATED LAWS

## **A 10174: People Survival Fund Act (2011)**

- Annual fund intended for local government units and accredited local/community organizations to implement climate change adaptation projects

## **RA 9729: The Philippine Climate Change Act of 2009**

- Aims to mainstream climate change into government policy formulations, establishes the framework strategy and program on climate change and creates the Climate Change Commission (CCC).
- The CCC is under the Office of the President and is the "sole policy-making body of the government which shall be tasked to coordinate, monitor and evaluate the programs and action plans of the government relating to climate change pursuant to the provisions of this Act."



# CLIMATE CHANGE MITIGATION AND ADAPTATION RELATED LAWS

## RA 9513 – Renewable Energy Act of 2008

General Incentives:

- **Income Tax Holiday (ITH)** - For the first seven (7) years of its commercial operations
- **Duty-free Importation of RE Machinery, Equipment and Materials** - Within the first ten (10) years upon the
- **issuance of a certification of an RE developer**
- **Special Realty Tax Rates on Equipment and Machinery**
- **Net Operating Loss Carry-Over (NOLCO)**. - The NOLCO of the RE Developer during the first three (3) years from the start of commercial operation which had not been previously offset as deduction from gross income shall be carried over as a deduction from gross income for the next seven (7) consecutive taxable years immediately following the year of such loss.



# CLIMATE CHANGE MITIGATION AND ADAPTATION RELATED LAWS

## RA 9513 – Renewable Energy Act of 2008

- **Corporate Tax Rate** - After seven (7) years of income tax holiday, all RE Developers shall pay a corporate tax of ten percent (10%) on its net taxable income as defined in the National Internal Revenue Act of 1997,
- **Accelerated Depreciation** - If, and only if, an RE project fails to receive an ITH before full operation
- **Declining balance method**
- **Sum-of-the years digit method**
- **Zero Percent Value-Added Tax Rate**
- **Cash Incentive of Renewable Energy Developers for Missionary Electrification**
- **Tax Exemption of Carbon Credits**
- **Tax Credit on Domestic Capital Equipment and Services**



# CLIMATE CHANGE MITIGATION AND ADAPTATION RELATED LAWS

## RA 9513 – Renewable Energy Act of 2008

Other provisions:

- **Tax and Duty-free Importation of Components, Parts and Materials**
- **Tax Credit on Domestic Capital Components, Parts and Materials**
- **Income Tax Holiday and Exemption** - For seven (7) years starting from the date of recognition/accreditation, an RE manufacturer, fabricator and supplier of RE equipment shall be fully exempt from income taxes levied by the National Government on net income derived only from the sale of RE equipment, machinery, parts and services; and
- **Zero-rated value added tax transactions** - All manufacturers, fabricators and suppliers of locally produced renewable energy equipment shall be subject to zero-rated value added tax on its transactions with local suppliers of goods, properties and services.



# CLIMATE CHANGE MITIGATION AND ADAPTATION RELATED LAWS

## RA 9513 – Renewable Energy Act of 2008

### **Section 22. Incentives for Farmers Engaged in the Plantation of Biomass Resources.**

For a period of ten (10) years after the effectivity of this Act, all individuals and entities engaged in the plantation of crops and trees used as biomass resources such as but not limited to jatropha, coconut, and sugarcane, as certified by the Department of Energy, shall be entitled to duty-free importation and be exempted from Value-Added Tax (VAT).

### **Section 23. Tax Rebate for Purchase of RE Components**

Rebates for all or part of the tax paid for the purchase of RE equipment for residential, industrial, or community use.



# CLIMATE CHANGE MITIGATION AND ADAPTATION RELATED LAWS

## RA 9367 – Biofuels Act of 2006

Incentives:

- **Specific tax** - local or imported biofuels component per liter of volume shall be zero
- **Value added tax**
- **Water Effluents** - slops used as fertilizer Exempt from waste water charge
- **Financial assistance from GFIs**



# AGENCIES INVOLVED IN CLIMATE CHANGE PROGRAMS, POLICIES

## Climate Change Commission (CCC)

- Sole policy-making body of the government which shall be tasked to coordinate, monitor and evaluate the programs and action plans of the government
- Development and formulation of the National Climate Change Action Plan

## Department of Environment and Natural Resources- Climate Change Office

- DENR serves as national designated authority for the Green Climate Fund
- DENR Administrative order 2009-04 and serves as the coordinating mechanism internally among the DENR offices as well as externally, with other national government agencies, non-government organizations and local government units on matters related to climate change.

## Department of Energy (DOE)

- The Philippines is implementing sustainable energy policies domestically to address the adverse effects of climate change, consistent with the principles of the UNFCCC.



# INCENTIVIZATION

## DTI-BOI initiatives and policies for environment-related projects:

- 1) **Industry Development Program**
- 2) **Manufacturing Resurgence Program**
- 3) **Greening Industry Roadmaps** - propels climate-smart, environment-friendly, and globally-competitive industries.



# INCENTIVIZATION

**Priority industries:** Automotive, auto parts, plastic, pulp and paper, housing and furniture.

**Projects qualified for incentives are:**

- Manufacture/assembly of goods and establishment of energy efficiency related facilities
- Establishment of privately owned-MRF
- “Green Ship” recycling based on international standards
- Industrial Waste Treatment for Toxic and hazardous waste from on industrial operation.
- Power generation projects utilizing renewable energy at least a super-critical boiler technology, or its equivalent in terms of emissions for coal fired-power plants.



# INCENTIVIZATION

## Incentives:

### 1) Income Tax Holiday

- 6 years for projects with pioneer status and for projects located in less developed areas
- 4 years for new projects with non-pioneer status
- 3 years for expansion/modernization projects

### 2) Duty exemption on imported capital equipment



## **CLIMATE CHANGE IS A FUNDAMENTAL THREAT TO DEVELOPMENT**

**(if unchecked, will worsen poverty)**

## **CLIMATE ADAPTATION IS A PARTNERSHIP**

**(government, business, and other stakeholders)**

## **CLIMATE ADAPTATION REQUIRES A CONDUCTIVE POLICY ENVIRONMENT**

## **CLIMATE CHANGE ADAPTATION PRESENTS A LOT OF BUSINESS OPPORTUNITIES**

- **firms should develop strategies towards a carbon-free future**

## **INVESTMENT IN CLIMATE SMART TECHNOLOGIES ALSO MAKE GOOD BUSINESS SENSE**

## **IT IS GOOD FOR THE BOTTOMLINE**

## **COMPETITIVENESS**

## **IT PAYS FOR ITSELF**

