

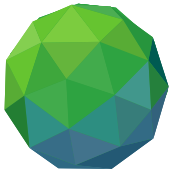
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# **Climate Change and Water Projects Towards Bankable Projects**

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Division of Mitigation and Adaptation  
Green Climate Fund

6 February 2018 | Manila, Philippines

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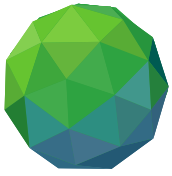
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# Our Vision

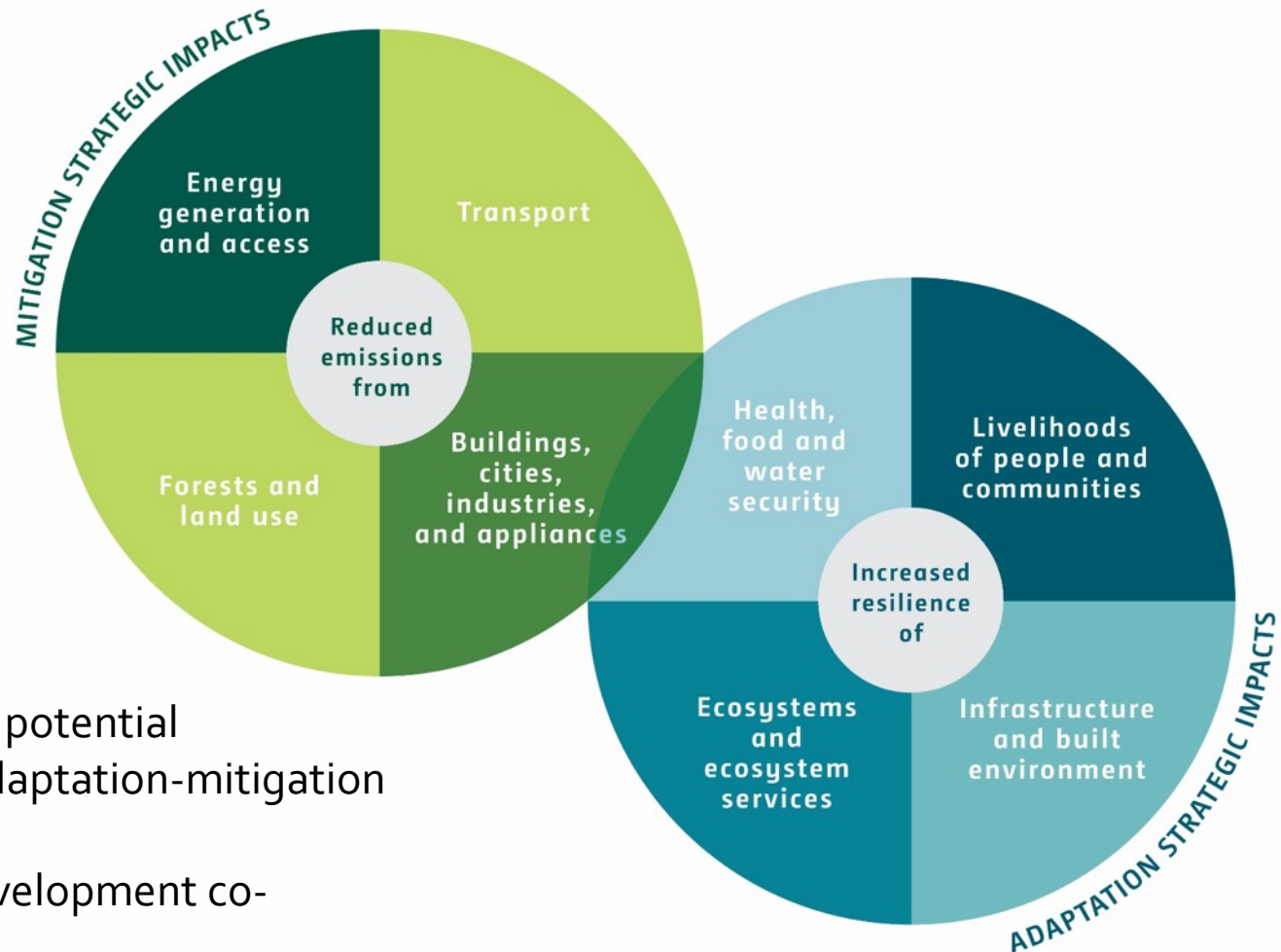
## With a Mandate:

To promote low-emission and climate resilient development in developing countries.



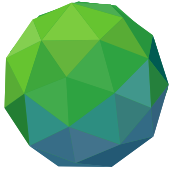
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# 8 Strategic Results Areas



## With a focus on...

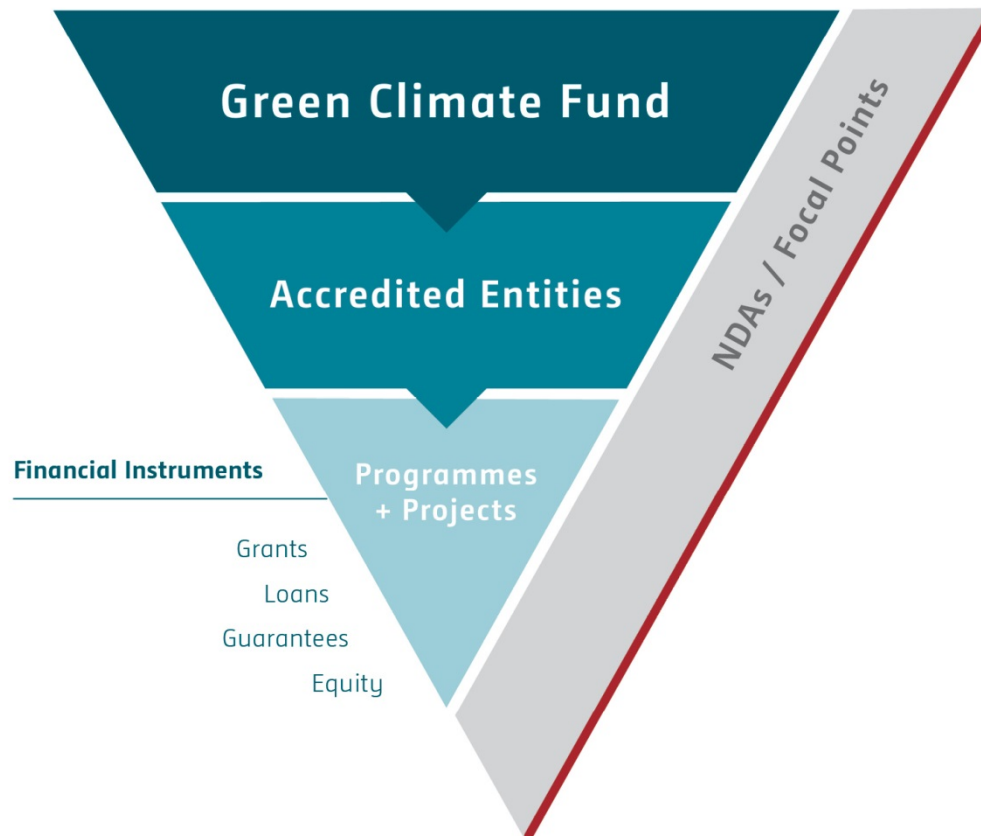
- Impacts
- Paradigm-shift potential
- Crosscutting adaptation-mitigation benefits
- Sustainable development co-benefits

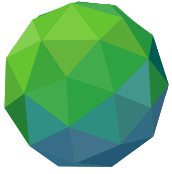


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# The GCF Architecture

## GCF Architecture





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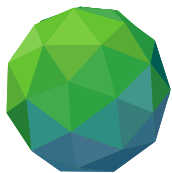
# Engaging with GCF

Establish and maintain a National Designated Authority (NDA) or focal point

Strategic engagement through country programmes

Identify and seek accreditation of entities to access resources from the Fund

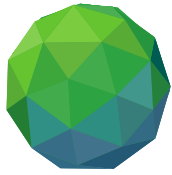
Develop projects and programmes to bring forward funding proposals through accredited entities



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# National Designated Authorities and Accredited Agencies





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# Six Investment Criteria

## Against which proposals are assessed

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 and, if appropriate, financial soundness, as well as 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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# Results Management Framework

Mitigation

## Impact level results

- 1.0 Reduced emissions through increased low-emission energy access and power generation
- 2.0 Reduced emissions through increased access to low-emission transport
- 3.0 Reduced emissions from buildings, cities, industries and appliances
- 4.0 Reduced emissions from land use, deforestation, forest degradation, and through sustainable forest management and conservation and enhancement of forest carbon stocks

## Outcome level results

- 5.0 Strengthened institutional and regulatory systems for low-emission planning and development
- 6.0 Increased number of small, medium and large low-emission power suppliers
- 7.0 Lower energy intensity of buildings, cities, industries, and appliances
- 8.0 Increased use of low-carbon transport
- 9.0 Improved management of land or forest areas contributing to emissions reductions

## Adaptation

### Impact level results

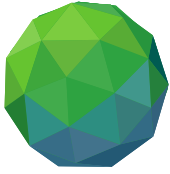
- 1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities, and regions
- 2.0 Increased resilience of health and well-being, and food and water security
- 3.0 Increased resilience of infrastructure and the built environment to climate change threats
- 4.0 Improved resilience of ecosystems and ecosystem services

### Outcome level results

- 5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development
- 6.0 Increased generation and use of climate information in decision-making
- 7.0 Strengthened adaptive capacity and reduced exposure to climate risks
- 8.0 Strengthened awareness of climate threats and risk-reduction processes



# **Part II: Climate and Water Projects**



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# Water and Climate Change

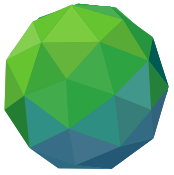
“it is through the water sector that most of the impacts of climate change will be felt....”

Runoff    Flood Flows    Erosion

Sea levels    Wave heights    Storm frequency

Rainfall totals & intensity

Evapotranspiration    Glaciation

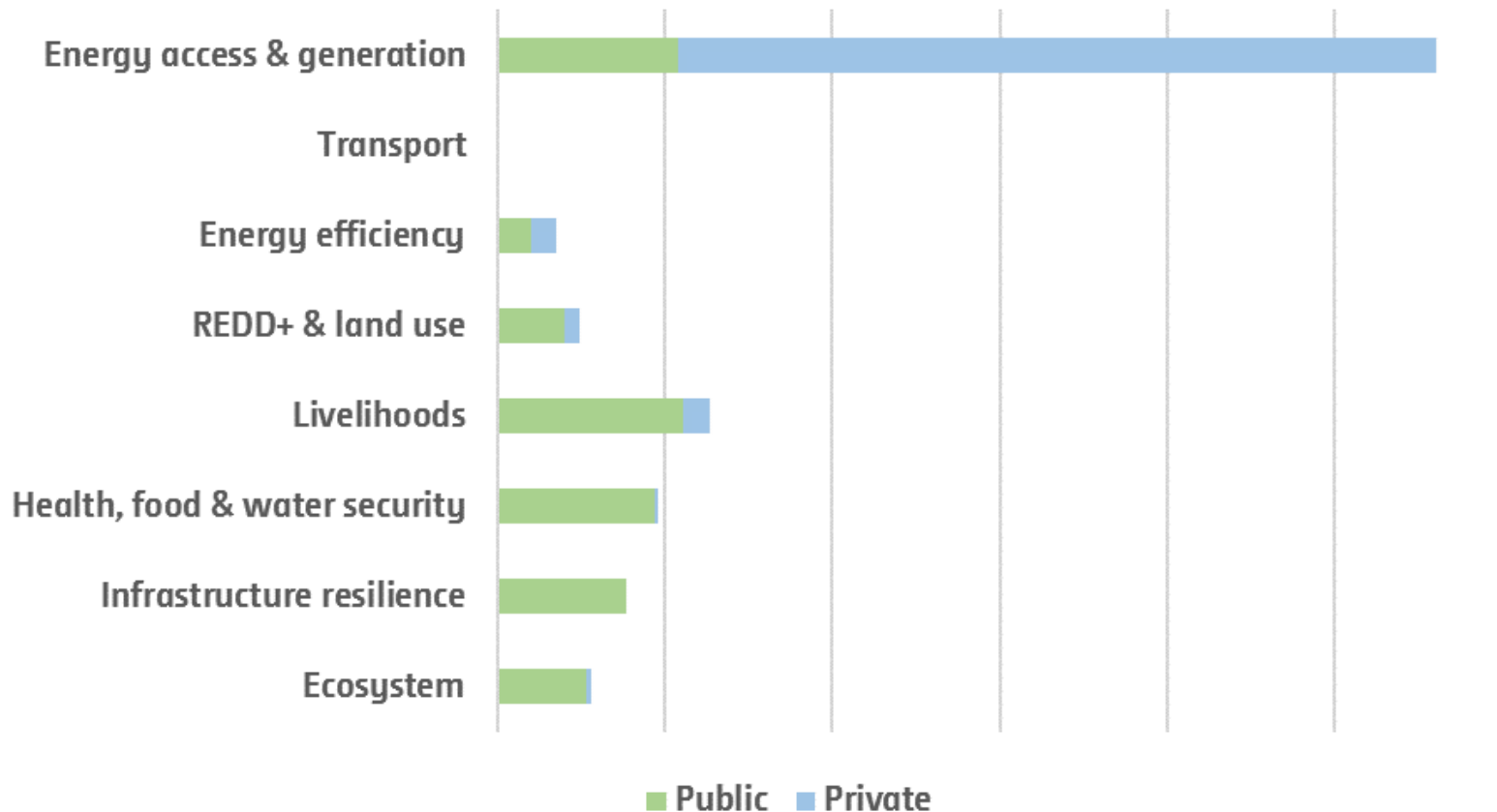


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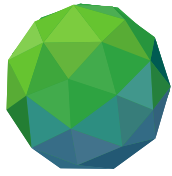
# Investments by Results Areas

## Portfolio

Relative weight of area in public and private sector projects



Status as of B17 (July 2017)



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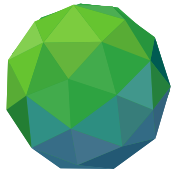
# Flood and Coastal Management

## Examples in Egypt, Bangladesh and others:

GCF will consider all adaptation options, including:

1. Resilient buildings
2. Livelihoods adaption
3. Land use zoning
4. Insurance
5. Soft flood defences
6. Hard defences
7. Managed Retreat





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# Water Resources Management

## Addressing scarcity due to Climate Change:

GCF will consider all resilient adaptation options, including:

### Demand management

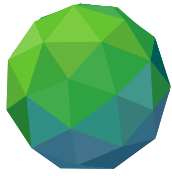
1. Leakage reduction
2. Water re-use & recycling
3. Efficient irrigation

### Supply enhancement

1. More storage e.g. groundwater
2. New supply infrastructure



Least or negative emissions impacts, optimising Environmental & Social impacts



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# Adaptation - potential projects

## Urban Drainage

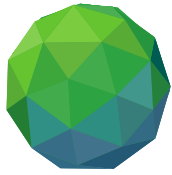


## Irrigation efficiency



## Coastal Defences

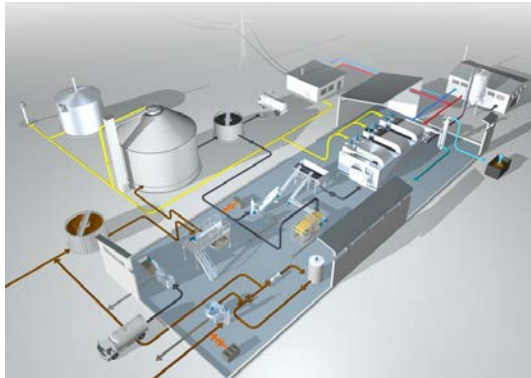




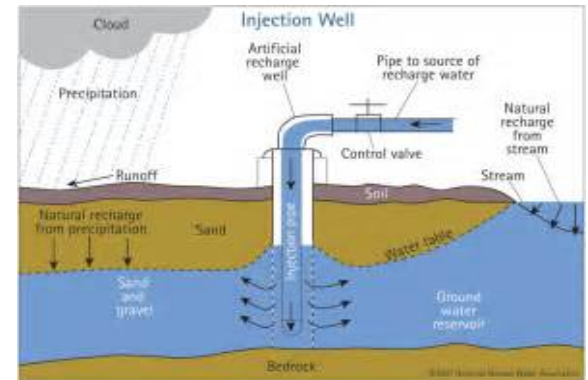
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# Adaptation – potential projects

## Wastewater (Reuse)

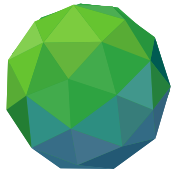


## Groundwater



## Water and health (Water related diseases)





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# Mitigation – potential projects

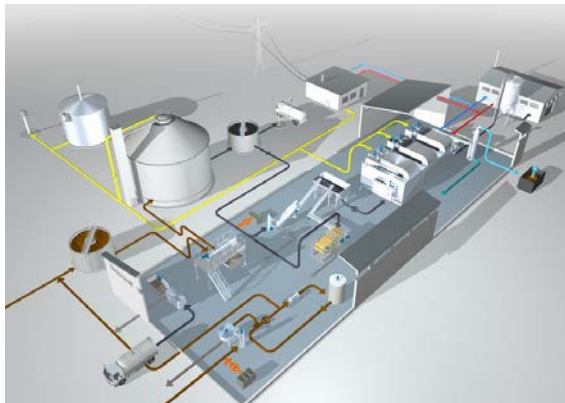
## Hydropower

(run of the river / rehabilitation / new build)



## Wastewater

(Energy from sewage)

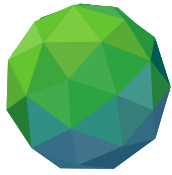


## Navigation

(low emissions transport)







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# To bankable projects

## **Climate rationale**

Emission reductions or resilience of infrastructure or livelihoods

## **Vulnerability**

Those most in need

## **Attribution**

GHG link and contributions from GCF

## **Options**

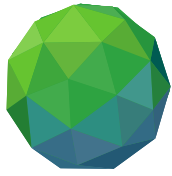
Solving the problem in the best way

## **Concessionality**

Efficient use of financial resources

## **Resilience and sustainability**

Long term durable benefits

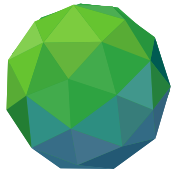


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# Investment Criteria Climate Rationale

## What are we adapting to?

- Credible link between the problem being addressed and GHG-induced climate change
- Refer to GCMs, weather records where available
- GCF mandate - not other climate effects – eg El Nino, nor overabstraction, pollution etc...

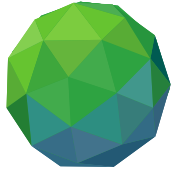


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# Investment Criteria Vulnerability

## Why are working in this location?

- Least adaptive capacity
- Most vulnerable people and ecosystems
- Disadvantaged groups
- Gender
- Viable future?

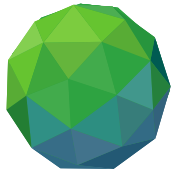


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# Investment Criteria Attribution

How much of the problem is caused by GHG emissions?

- Is the linkage to climate change relevant, clear and strong?
- Can we enumerate the % impact of climate change? = % of GCF funding
- If there were no climate change, would we still be doing this project?

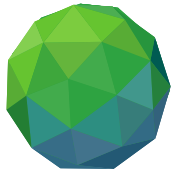


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# Investment Criteria Options

## Efficiency and effectiveness

- What are all the options to tackle this CC impact?
- IWRM, flood “management” vs “defence”
- Resilience - DRR
- Low emissions pathways

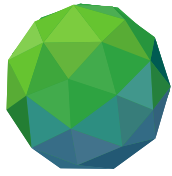


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# Investment Criteria Sustainability

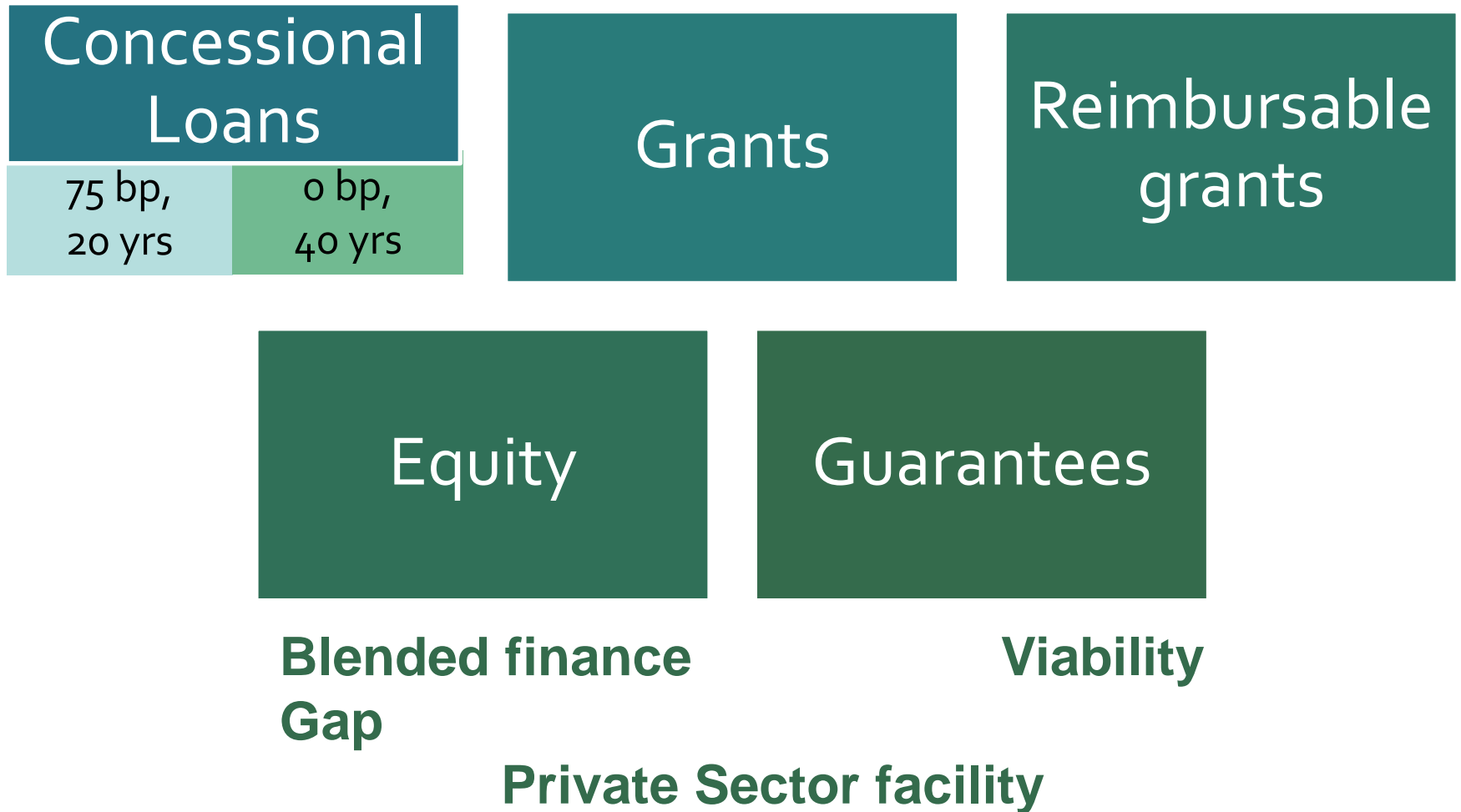
## Exit strategy and the paradigm shift

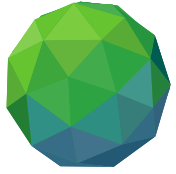
- Can results be sustained after GCF funding ends?
- Is there a plan and budget for operations and maintenance?
- Is capacity building and institutional strengthening required?
- How can the project be replicated and scaled up?



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# The right financial instrument?





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# Lessons and challenges

## **Right level of concessionality and use of financial instruments**

- LOANS in most revenue-generating projects (energy, water supply)
- GRANTS in LDCs and highly vulnerable countries

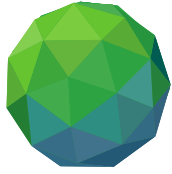
**Provision of cofinancing** by other donors, Government or local private partners

Choice of **National and International Entities**

**Concessionality benefitting final users**

e.g. accessing cheaper loans, lower tariffs





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# Public Sector - or - Private Sector ?

## Why the PSF?

- To mainstream climate change mitigation and adaptation actions in the private sector.

## Interventions possible

- Fund climate risk assessment models and tools
- Long-term debt, credit lines and refinancing
- Equity to develop a project to full bankability
- Guarantees to bear specific risks

## Access to the private sector

- Accredited entities with private sector operations.
- Present funding proposals spontaneously or in response to calls for proposals.

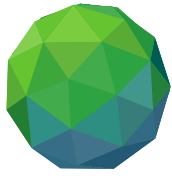


# Environment & Social requirements

Other requirements in line with PS 2-8, with actions to address adverse issues raised in the risks and impacts identification process

<b>PS2, Labour and Working Conditions</b>	Integrated in ESMP/ESMF – grievance redress for workers, occupational health and safety
<b>PS3, Resource Efficiency and Pollution Prevention</b>	Integrated in ESMP/ESMF – pollution abatement, water and energy conservation, GHG emissions
<b>PS4, Community Health, Safety, and Security</b>	Integrated in ESMP/ESMF – community nuisance; specific studies on critical infrastructure (ex. dam safety)
<b>PS5, Land Acquisition and Involuntary Resettlement</b>	Resettlement Action Plan ( <i>physical displacement</i> ), Livelihoods Restoration Plan ( <i>economic displacement</i> ), Land Acquisition Plan or Frameworks
<b>PS6, Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>	Biodiversity Action Plan, Integrated into PA management plans, supply chain
<b>PS7, Indigenous Peoples</b>	Indigenous Peoples Plan/Indigenous Peoples Planning Framework <i>or</i> Community Development Plan with separate components for IPs
<b>PS8, Cultural Heritage</b>	Integrated in ESMP/ESMF – survey of PCRs and intangible and traditional knowledge; chance find

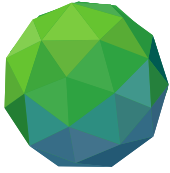
# **Part II: Portfolio overview**



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# A quick progress report

- Over USD 2.65 billion committed to 54 projects
- Over \$600M of projects under way
- Around USD 150 million disbursed (up from \$11 million in 2016)
- 59 Accredited Entities, including 32 (over half) Direct Access entities
- 130 readiness applications approved for 92 countries at a value of over \$40m, over \$10m disbursed
- Up to \$3 million per country to support NAPs/adaptation planning
- \$500 million Request for Proposals on Mobilizing Funds at Scale
- \$500 million REDD+ results-based payments pilot
- Over 100 countries engaged on country programming



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# The GCF Portfolio

## GCF IN NUMBERS

Read the latest key figures and facts related to the operations of the Green Climate Fund which are available in this overview:  
**GCF in Numbers** – September 2017 edition.

No. of GCF projects approved

43

No. of Accredited Entities

54

Amount disbursed for readiness (USD)

10.3m

Resources mobilized (USD)

10.3b

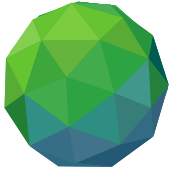
## OUR PROJECTS

PORTFOLIO  
DASHBOARD

[View GCF's current portfolio](#)

PROJECTS +  
PROGRAMMES

[Browse our projects](#)

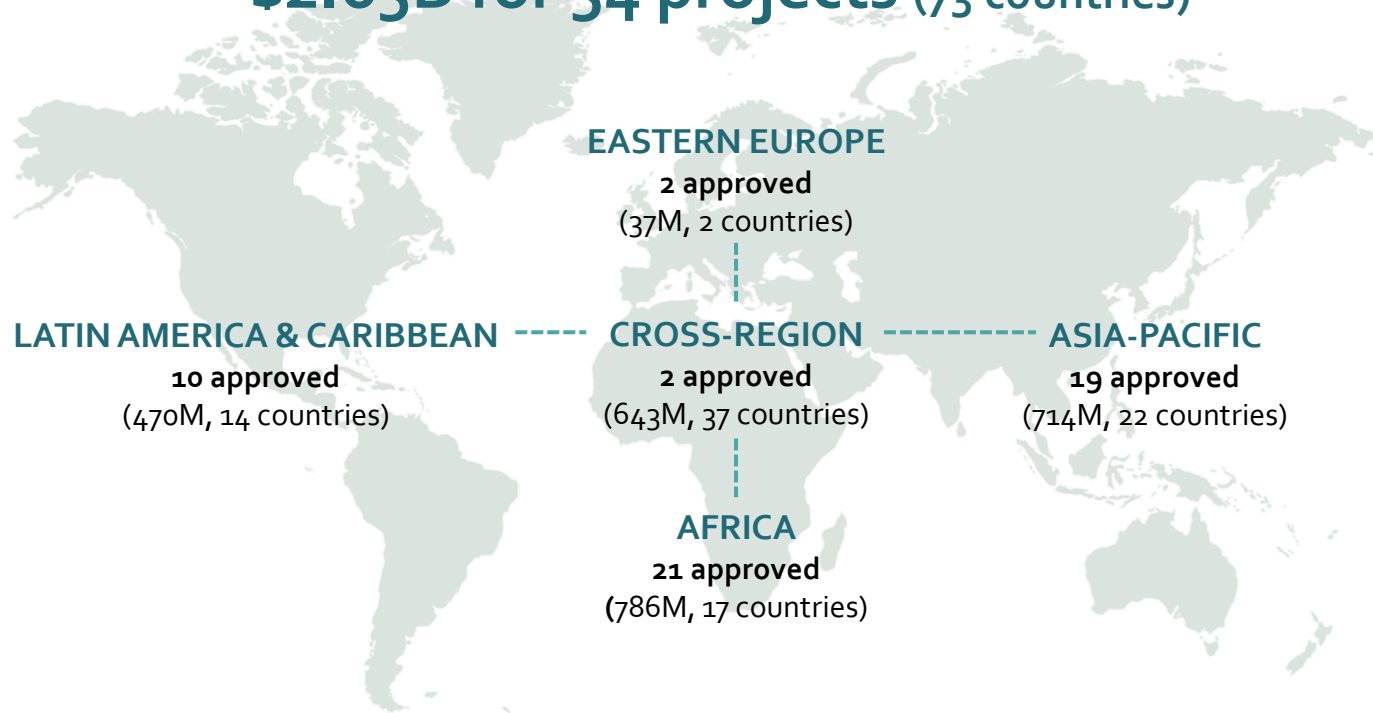


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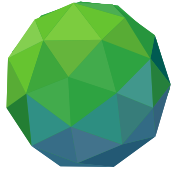
# A growing portfolio

(Total)

**\$2.65B for 54 projects** (73 countries)



Status as of B.18 (Oct 2017)



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# Estimated Climate Impact

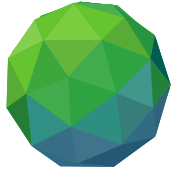
Portfolio

Mitigation impacts

**981** MtCO<sub>2</sub>eq

Adaptation impacts

**218** M beneficiaries



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# GCF and ADB

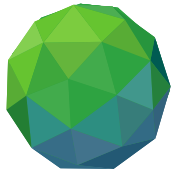
- High vulnerability of Asia Pacific Region; high potential losses\*
- Range of challenges – mountains, deltas, SIDS ....
- Assist NDCs
- Spotlight on cities
  - Significant water related infrastructure that needs to be resilient
- Leverage co-financing

\*ADB Climate Change Operational Framework 2017–2030



# A Diverse Network of Partners

59 entities accredited to date



GREEN CLIMATE FUND



Asian Development Bank



AGENCE FRANÇAISE DE DÉVELOPPEMENT



Food and Agriculture Organization of the United Nations



Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



Inter-American Development Bank



International Finance Corporation WORLD BANK GROUP



INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT



GROUPE AGENCE FRANÇAISE DE DÉVELOPPEMENT



wfp.org

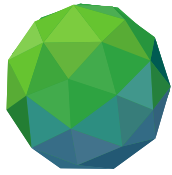


World Meteorological Organisation



THE WORLD BANK IBRD + IDA





GREEN CLIMATE FUND

# Approved Projects

<http://www.greenclimate.fund/projects/browse-projects>

## BROWSE RECENT PROJECTS

PORTFOLIO  
BROWSE PROJECTS

### RELATED DOCUMENTS

- Investment Framework
- Investment Criteria
- Proposal Approval Process
- Results Management Framework (RMF)

**PROJECT FP037**  
Integrated Flood Management to Enhance Climate Resilience of the Vaisigano River Catchment in Samoa

**PROJECT FP036**  
Pacific Islands Renewable Energy Investment Program

**PROJECT FP035**  
Climate Information Services for Resilient Development in Vanuatu

**PROJECT FP034**  
Building Resilient Communities, Wetlands Ecosystems and Associated Catchments in Uganda

**PROJECT FP033**  
Accelerating the Transformational Shift to a Low-Carbon Economy in the Republic of Mauritius

**PROJECT FP030**  
Catalyzing private investment in sustainable energy in Argentina - Part 1

**PROJECT FP029**  
SCF Capital Solutions

**PROJECT FP028**  
Business loan programme for GHG emissions reduction

**PROJECT FP027**  
Universal Green Energy Access Programme

For more info, visit [www.greenclimate.fund](http://www.greenclimate.fund)

## Quick links

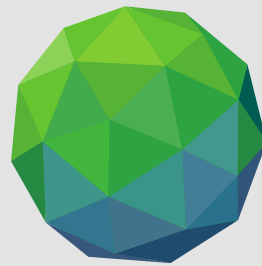
[GCF 101](#)

[GCF portfolio](#)

[Accredited Entity composition](#)

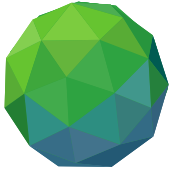
[Resources mobilized](#)

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# **Part III: Example Projects**



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# Scaling Up Hydropower Sector Climate Resilience



*Tajikistan*

**Accredited Entity**  
EBRD

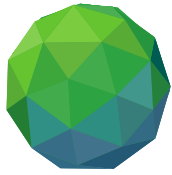
**Executing Entity**  
Ministry of Finance

**Emission Reductions**  
7.5 MtCO<sub>2</sub>eq

**Total Funding**  
USD 133M

**GCF Funding**  
USD 27M Loan + 23.0M Grant

**Duration**  
5 Years



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# Coastal Communities and salinity

*Bangladesh*



**Accredited Entity**  
UNDP

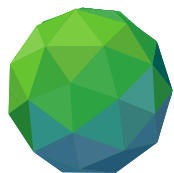
**Executing Entity**  
Ministry of Women and  
Children Affairs

**Beneficiaries**  
719,229

**Total Funding**  
\$33M

**GCF Funding**  
\$25M Grant

**Scope**  
Rural water supply and livelihoods



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# Tina River Hydropower

*Solomon Islands*



**Accredited Entity**  
WB

**Executing Entity**  
Ministry of Finance

**Emission Reductions**  
2.53 MtCO<sub>2</sub>eq

**Total Funding**  
USD 234M

**GCF Funding**  
SD 70M Loan + 16M Grant

**Duration**  
5 Years