GREEN CLIMATE FUND

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GCF Portfolio (in the Energy Sector) and Lessons Learned

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CTCN – 10 July 2026

2026 Joint Programme: NDE Forum, Capacity Building on Integrating Energy Technologies, and NDE-NDA coordination in Asia

GCF.10

10 YEARS OF CLIMATE IMPACT

Overview

1. Overview Portfolio
2. Priorities
3. (Energy) Portfolio and examples of projects (technology)
4. 10 lessons Learned from the Portfolio

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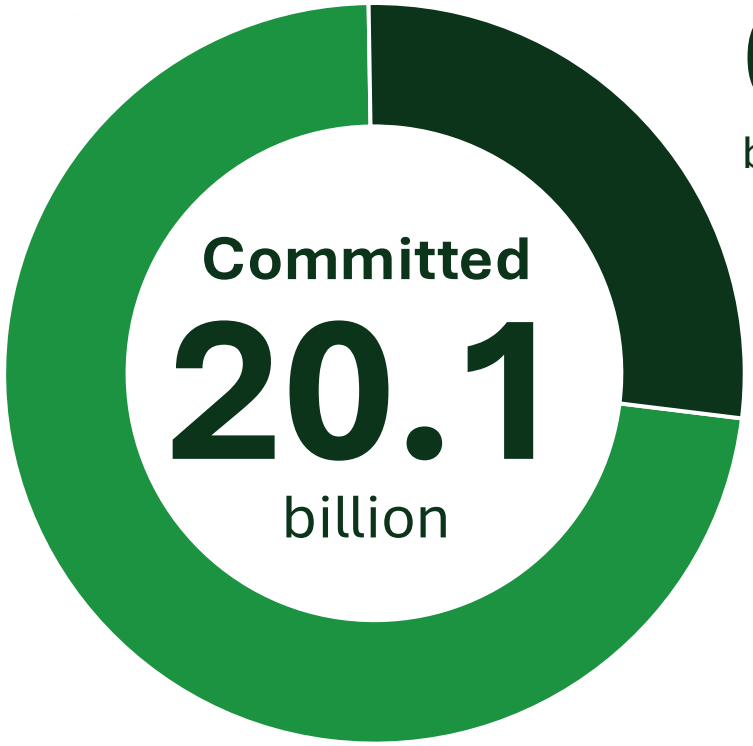
GCF in figures (USD) – as per March 2026

Total GCF portfolio commitment



Disbursed

6.5
billion

Implementing

17.4
billion

Portfolio value, including co-financing:

80.1
billion

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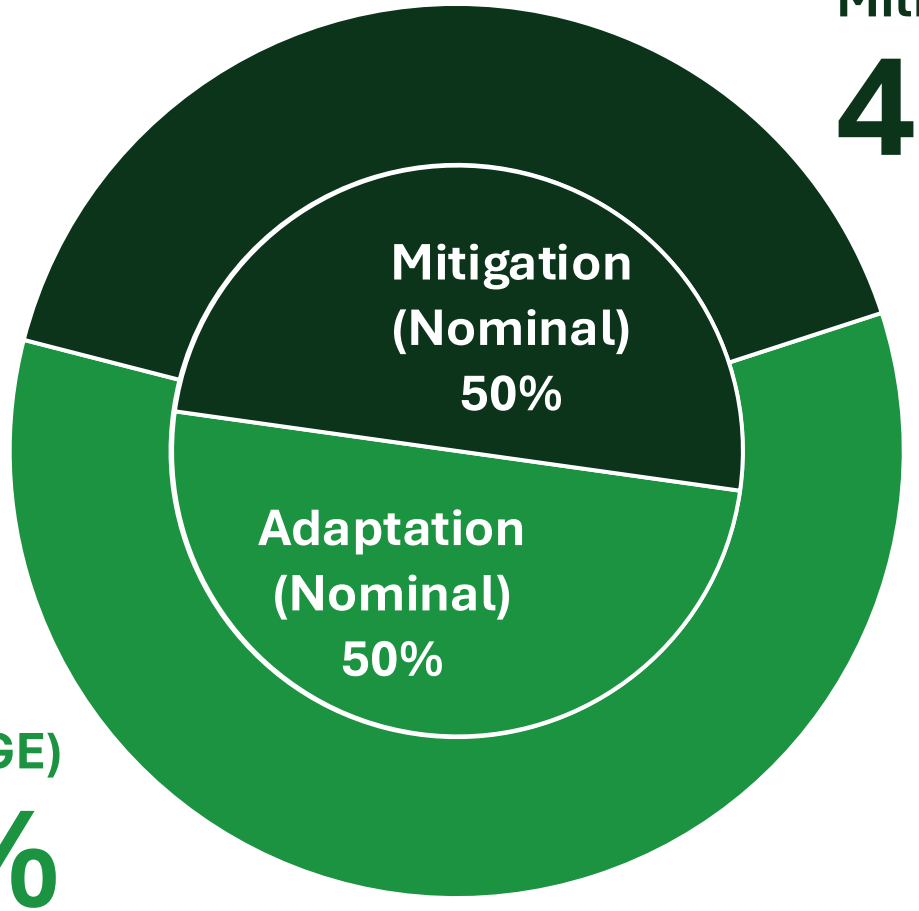
Our portfolio in focus – as of 3 Apr 2026

Balancing adaptation & mitigation

Mitigation (GE)
41%



Adaptation (GE)
59%

Our portfolio in focus

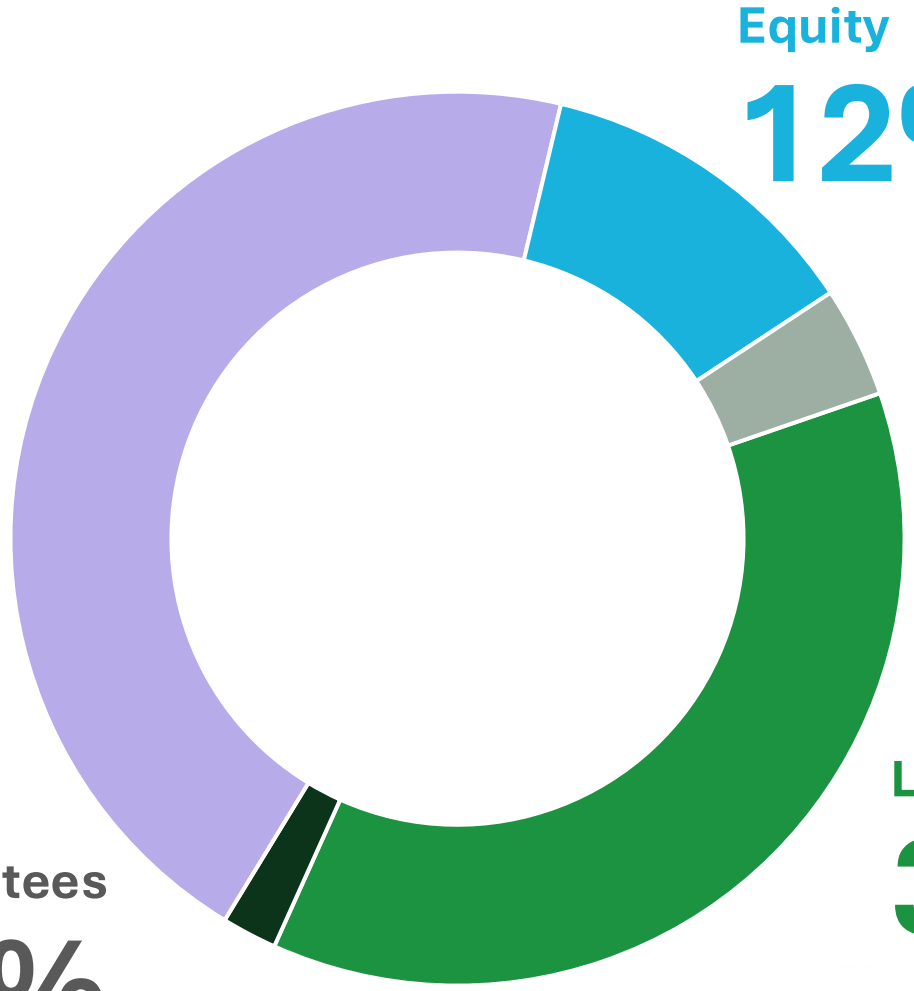
Funding amount by sector (billion USD)

Private 7.2b
36%

Public 13.0b
64%

Our portfolio in focus

Funding amount by financial instruments (billion USD)



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Programming priorities 2024-2027

Empower developing countries

As a climate capacity-builder, GCF will enhance its **Readiness Programme** to help countries translate their Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and Long-term Climate Strategies (LTS) into climate investments and programming.

Mobilise the private sector

GCF will optimise its risk appetite and flexible financing to engage the **private sector and unlock the financial flows** needed by developing countries for climate action.

Improve access

GCF is committed to significantly improve access for developing countries to GCF finance, **ensuring funding is delivered efficiently and effectively** to communities who need it the most

Protect the most vulnerable

GCF will enhance support for the **most vulnerable people and communities** to address their immediate adaptation and resilience needs, such as urgent climate threats by expanding coverage of climate information and early warning systems.

Preparing Strong Proposals for GCF Financing

Strong Climate Thesis

- Clear identification of climate change problems, supported by scientific evidence
- Why the proposed investment would be the most appropriate to address it

Six Investment Criteria

- Impact potential
- Paradigm shift potential
- Sustainable development potential
- Recipient needs
- Country ownership
- Efficiency & effectiveness

Country Driven Approach

- Alignment with Nationally Determined Contributions
- Early country (NDA) engagement
- NDA no-objection

Key required documentation

- Feasibility study
- Financial model
- Project timetable
- Gender analysis
- Environmental studies
- No-objection letter

Additionality of GCF Funding

- Why GCF?
- Crowd-in additional financing on top of GCF
- Complementarity & coherence of funds

Compliance with GCF Policies

- Accreditation
- Fiduciary standards
- Risk management
- Environmental and social safeguards
- M&E criteria
- Gender, Sexual Exploitation, Abuse and Harassment (SEAH), Indigenous Peoples Policy
- Legal standards

Climate Problem Identification

GCF Board Decision B.33/12 which sets out the "Principles for demonstrating the impact potential of GCF-supported activities".

Mitigation	**Climate Problem Identification:** Analysis of how the sector of interest contributes to national greenhouse gas emissions. This information should be available in the Nationally Determined Contributions (NDC) documentation or in national greenhouse gas inventories. **Solution identified**: Provide a clear explanation of how contemplated solutions have the potential to transform the sector and reduce emissions, with an explanation of why current mitigation efforts are insufficient and emission reduction would not occur without the proposed intervention (Additionality)
Adaptation	**Climate Problem Identification:** Outline how the activity addresses current or future projected climate change risk or impact: a. Identify the climate hazard or climate risk b. Identify the population / sector that is exposed to the climate hazard c. Identify the vulnerability of the population / sector that is exposed to the climate hazard **Solution identified:** Provide an analysis of how the activity is expected to reduce the exposure and/or vulnerability (of people, systems, ecosystems or sectors) and thus lessen the climate change risk or impact.

Steps to adaptation Impact Potential

Identification

Response

1. Hazard

Hazards refers to as the potential occurrence of a physical event or trend that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems and environmental resources.

- It is important to understand the ***anthropogenic climate change*** drivers and the ***natural variability***
- Hazards should be evidenced by ***historical data*** and ***future projections*** and typically include ***changes*** to:
  - Temperature; Precipitation
  - Drought; Flood; Etc…

2. Impact

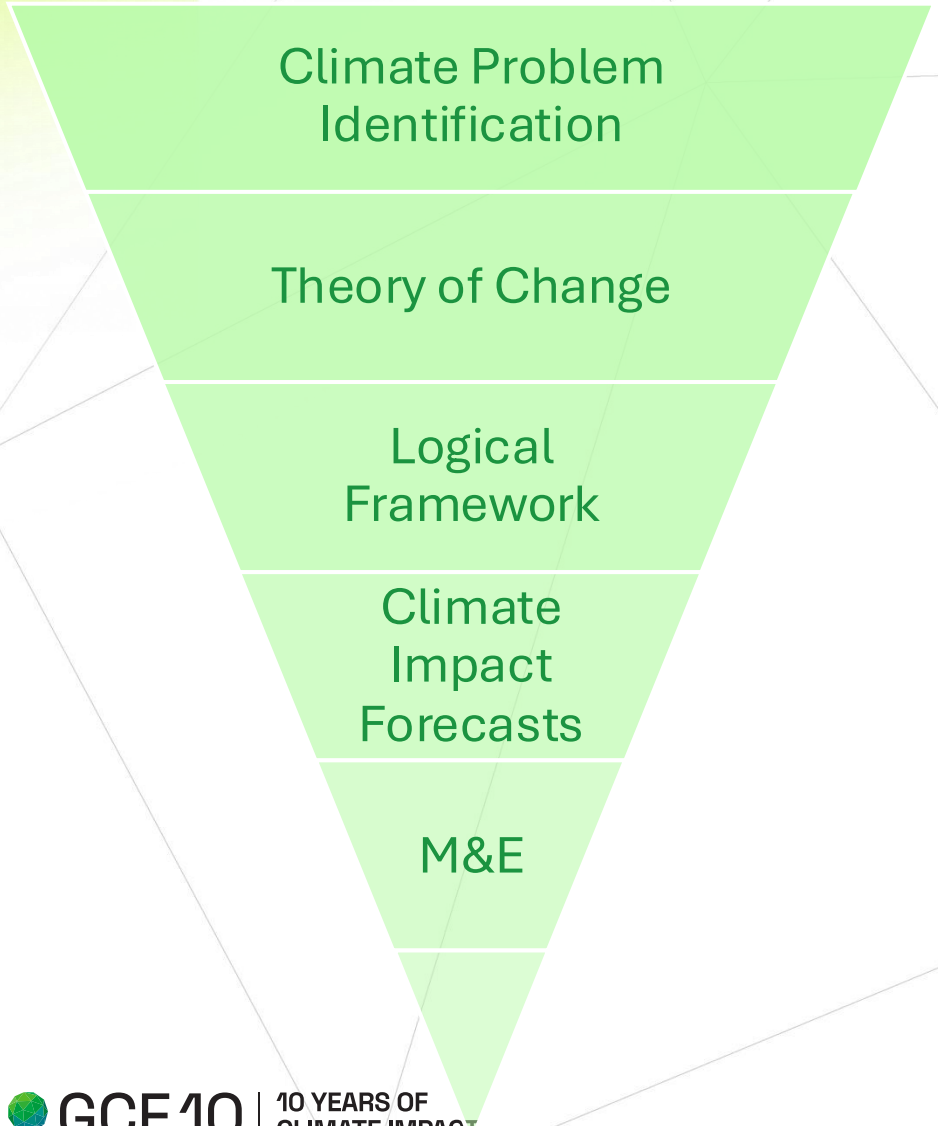
Impact refers to effects on lives, livelihoods, health, ecosystems, economies, societies, cultures, services, and infrastructure due to the interaction of climate changes or hazardous climate change events occurring within a specific time-period and the vulnerability of an exposed society or system.

- Evidence of ***Impact*** must be presented and should distinguish between those linked to the climatic ***hazard*** and to ***non-climatic*** human induced impacts such as those that result from unsustainable consumption of natural resources, land and ecosystem degradation.

3. Response

Response refers to the causality link of how the proposed activities will reduce the exposure and/or vulnerability (of people, systems, or ecosystems) and thus reduce the risk of climate change impact.

GCF's Climate Thesis Framework



Step 1: Justification that describes the Climate Problem to be solved in the targeted geographies and what the appropriate solutions would be.

Step 2: Strategic Roadmap that links the barriers and risks to implementing appropriate solutions, activities to address them and targeted results.

Step 3: Management Tool that translates the Theory of Change into concrete, actionable, and measurable indicators.

Step 4: Forecasted calculations of emissions reductions and adaptation beneficiaries, supporting methodologies as well the process for selecting such methodologies

Step 5: Process for collecting data, monitoring and evaluation of results and reporting to GCF.

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Transition of GCF's Renewable Energy Portfolio

Initial Resource Mobilization

Individual RE facility:

- 10 MW facility in Mongolia - XacBank

Utility scale RE frameworks

Successfully implemented projects in:

- Egypt - EBRD
- Kazakhstan - EBRD

GCF 1 (2020 – 2023)

Accelerated energy access through RE, especially in LDCs

- Mini-grids with battery storage in DRC – AfDB
- ASER solar rural electrification project in Senegal – BOAD
- Mini-grids in Haiti – NEFCO

New market modalities, innovative financial structures

- Embedded Generation Investment Programme in SA– DBSA
- Risk sharing for RE & EE in Argentina – IDB

Innovative and new technology

- Battery storage in Pacific SIDS (Cook Islands and Tonga) – ADB
- Sustainable Energy Facility in Caribbean – IDB

GCF 2 (2024 – 2027)

Human centric: Accelerated inclusive energy access

- ASCENT-GREEN: Resilient Energy Access for Inclusive Development – WB
- Scaling climate-smart solutions for hardest-to-reach MSMEs and farmers in Kenya (CST Facility) - KCB

Drive development, strengthening local FIs

- India Green Finance Facility (IGFF) - ADB

Innovation and Technology transfer

- CC Asia Climate Fund (CC-ACF) – CC global
- Collaborative R&DB Programme for Promoting Innovation of Climate Technopreneurship - KDB

Shift from 'plain vanilla' RE projects at concessional rates to transformative programmes through innovative deployment of risk bearing GCF capital

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• *Public Sector* O *Private Sector*

Project case study

FP297: CC Asia Climate Fund (CC-ACF)

Total project funding: USD 150m
GCF funding: USD 37.5m (equity)
Impact: 137,020 direct beneficiaries 327,376 indirect beneficiaries + 8.21m tCO2eq
Accredited Entity: CC Global Services Holdings Limited

Project description:

-Climate problem: rising temperatures, water stress, and increasing pressure on natural resources, while their energy systems remain heavily reliant on fossil fuels

-Market barrier: lack of sufficient financing to scale up innovations in clean technology (equity) (Renewable energy deployment, Resource efficiency and industry decarbonization, Weather-resilient buildings and sustainable construction, Water conservation and security, Climate-smart agriculture

-Equity fund + know-how sharing and technology transfer, sourcing both from FDI and home-grown innovations (active steward; by taking minority stakes and board seats)

-Sub-projects: USD 5 – 20m investment per portfolio company, growth-stage companies that are transferring proven climate technologies and business models to the region.

Cross-cutting

Kazakhstan, Mongolia, and Uzbekistan

Project case study

FP296: Navis Decarbonization Fund 1

Total project funding: USD 300m
GCF funding: USD 60m (equity)
Impact: 40,000 direct beneficiaries + 15m tCO2eq
Accredited Entity: Navis Capital Partners (Singapore) Pte. Ltd.

Project description

-Climate problem: monsoon patterns, prolonged dry seasons, and intensified rainfall events (flooding, drought, rising temperature, etc.)

-Market barrier: lack of equity financing in SMEs (energy access and power generation, infrastructure and built environment, low emission transportation, and sustainable agriculture and water).

-Fund: Equity fund, capital used to: mezzanine debt, convertible debt, common equity, minority equity

-Potential sub-projects: green micro-grid Philippines, bioCNG Malaysia, battery swapping for electric mobility, biochar Indonesia, sustainable microalgae, etc. (battery energy storage, circular economy materials, smart cooling, and precision agriculture)

Cross-cutting

Indonesia, Malaysia, Philippines (the), Thailand

Project case study

FP240 Collaborative R&DB Programme for Promoting the Innovation of Climate Technopreneurship

Total project funding: USD 221m

GCF funding: USD 104m (USD 80m first loss equity and USD 20m grant)

Impact: 1.6m tCO2eq + 1,180,881 direct beneficiaries

Accredited Entity: KDB (July 2024)

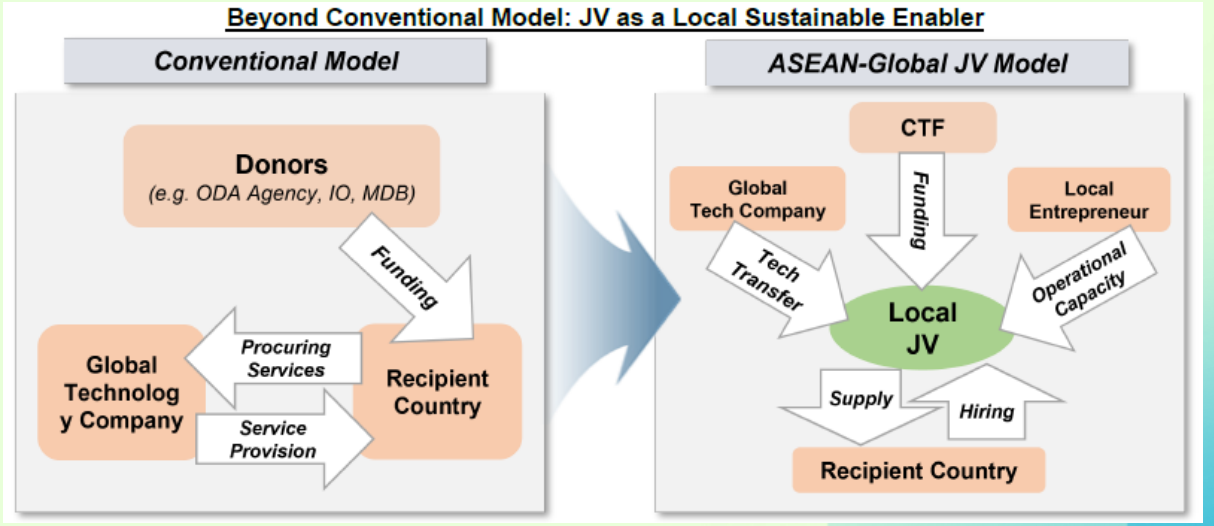
Project description:

-Technology Leapfrogging via Technology Transfer. Technological leapfrogging is achievable with technology transfer from industrialised countries to late-comer economies. The low-carbon and climate-resilient capacity of the developing world can be promptly fostered by absorbing commercially proven frontier technologies, skipping the technological evolution process that can take decades of experiments and trials and errors to get to the maturity point.

-renewable energy generation, low-emission transport, residential sector, waste management

Cross-cutting

Cambodia, Indonesia, Lao PDR, Philippines, and Vietnam



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10 lessons learned from project under implementation (1)

1

Track record of Executing Entities and Accredited Entities

2

Risk factors' analysis omitted an essential risks

3

Incomplete project design (e.g. weak feasibility study) leads to implementation problems as reality on the ground is different

10 lessons learned from project under implementation (2)

4

Project partners did not sufficiently discuss implementation matters during project design, leading to delays in signing of agreements between AE and EE and project changes

5

If FP involves private sector/reimbursable funds, preferably the AE should have some ‘skin in the game’

6

Procurement delays (TOR, procedure, etc)

10 lessons learned from project under implementation (3)

7

Cost escalations (Covid)

8

Markets can be dynamic

(what if?, flexibility)

9

Lack of measures to ensure sustainability of interventions (continue operations after project closure)

10

New CNs: climate problem not clear

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