Mitigation and adaptation performance measurement frameworks

This document is as adopted by the Board and contained in annex VIII to decision B.08/07, paragraph (a).

GREEN CLIMATE FUND

1.   The mitigation and adaptation performance measurement frameworks (PMFs) have been designed to measure the results of the Fund and, where appropriate, to serve as the basis for results-based payments, in accordance with any further guidance from the Board.

2.   The methodologies for the indicators identified in the PMF will be identified in line with the initial approach to the monitoring and evaluation policy as outlined in Annex II. Gender disaggregation for the indicators will be applied where possible.

3.   The mitigation and adaptation paradigm-shift results will be measured using a combination of quantitative and qualitative information that goes beyond simply aggregating the results' indicators.[1]

4.   Context-specific environmental, social and economic co-benefits can be identified on a project/programme case-by-case basis. Examples include improved public health, improved energy security and improved forest ecosystem health. Sustainable development potential, which entails co-benefits, is part of the investment criteria in the Fund's initial investment framework.

5.   Where applicable, mitigation projects/programmes that also generate adaptation results should report on adaptation indicators (and vice versa for adaptation projects/programmes with mitigation results). For example, a project that primarily intends to improve land and forest areas contributing to emission reductions (result 9.0 in the mitigation PMF) and, by doing so, also contribute to increasing the resilience of the ecosystem (result 4.0 in the adaptation PMF) would report on the relevant indicators for both mitigation and adaptation.

6.   The PMFs include notations where indicator screening based on the experience of other funds to date suggests that gender can be an integral part of reporting and analysis through disaggregated reporting (by gender). In some cases, gender-based data are not typically available or feasible to collect; however, as part of the further development of the indicator methodologies, additional analysis on where gender can be integrated explicitly into additional indicators will be conducted. Furthermore, as described below in chapter III, any additional work on the PMFs will take into consideration the Fund's draft Gender Policy and Action Plan (contained in document GCF/B.08/19).

7.   As pointed out in Board decision B.05/03,[2] the Fund is a continuously learning institution. The PMF results, indicators and associated methodologies will be refined and adapted as needed based on best practices and lessons learned, including to facilitate coherence with and responsiveness to efforts undertaken by countries within the context of the UNFCCC process.

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[1] Elements that are expected to be considered include: overall contribution to low-carbon development pathways consistent with a temperature increase of less than 2 degrees (mitigation), overall achievement in contributing to sustainable climate-resilient development pathways (adaptation), the degree to which knowledge and learning are achieved, extent to which the enabling environment is created or enhanced, and extent to which the regulatory framework and policies are strengthened.
[2] In GCF/B.05/23 (paragraph h, page 3).

A.   Mitigation performance measurement framework

8.   The proposed mitigation PMF in Table 1 is aligned with the mitigation logic model. The proposed associated indicators are listed next to their corresponding objective/impact/outcome. The notes provide information on the proposed methodology, disaggregation and relationship to indicators used by peer funds/agencies. Gender disaggregation for the indicators will be applied where applicable.

9.   The high-level PMF table format is intentionally simple: it does not include specifics that can be added later once the PMF is adopted, such as technical definitions, baselines, data sources, calculation methodologies, reporting format and targets.

10.   Initial methodologies for the three adopted mitigation core indicators are included in Annex V. Once the Board adopts the indicators in the PMF, detailed methodologies, including more specifics on gender, can be identified for these indicators.

11.   Some of the indicators in this PMF (particularly 1.1, 3.1 and 7.1) involve combining data across sectors so that the indicator matches with the intended results as articulated in the logic model. In these cases, each sector's data will be calculated separately according to methodologies suited for that sector and then totalled

Table 1: Mitigation performance measurement framework

☑= Decided

☐ = Noted, but further refinement needed

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[3]
Paradigm-shift Objective			
Shift to low-emission sustainable development pathways	☐ Degree to which the Fund is achieving low-emission sustainable development impacts	Secretariat	Proposed assessment based on a combination of quantitative and qualitative information that goes beyond simple aggregation of the results' indicators. Elements to be considered include the overall contribution to low-carbon development pathways, consistent with a temperature increase of less than 2 degrees, the degree to which knowledge and learning are achieved, extent to which the enabling environment is created or enhanced, and extent to which the regulatory framework and policies are strengthened.
Fund-level Impacts			
	☑ **Tonnes of carbon dioxide equivalent (t CO_2eq) reduced as a result of Fund-funded projects/ programmes**	Implementing entities (IEs)/ intermediaries	Aggregate summation of sector-specific t CO_2eq reduction indicators. Intended to be estimated ex-ante and reported annually and ex-post. Methodologies tailored to each sector – see specifics below and in Annex V.
	☑ ***Cost per t CO_2eq decreased for all Fund-funded**	IEs/ intermediaries	Intended to help understand anticipated costs (ex-ante) as well as trends in reducing costs of mitigation over time. Costs per t CO_2eq reduced

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[3] Notes are provided by the Secretariat for information only.

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[3]
	mitigation projects/ programmes		are expected to vary based on sector, technology, programme/project context, time scale, risk, etc.
	☑ ***Volume of finance leveraged by Fund funding**	IEs/ intermediaries	"Leveraged" considered synonymous with the term "mobilized" (used by other funds). Informed by CIF, International Finance Corporation (IFC), and others. Calculations to be disaggregated by public and private sources; prorated by amount of co-financing.
1.0 Reduced emissions through increased low-emission energy access and power generation	☑ 1.1 *Tonnes of carbon dioxide equivalent (t CO_2eq) reduced or avoided as a result of Fund-funded projects/programmes –*gender-sensitive energy access power generation (sub-indicator)*	IEs/ intermediaries	*Energy access:* - Based on gender-sensitive methodologies used by CIF's Program for Scaling Up Renewable Energy in Low Income Countries (SREP) core indicator 2. Disaggregated by gender. *Power generation:* - Methods to be informed by multilateral development banks'/international financial institutions' (MDBs/IFIs) GHG accounting harmonization work on energy efficiency and renewable energy; where feasible, gender-disaggregated data to be collected. Can also consider DFID GHG appraisal guidance and the Fund's 2013 energy efficiency guidelines.
2.0 Reduced emissions through increased access to low-emission transport	☑ 2.1 *Tonnes of carbon dioxide equivalent (t CO_2eq) reduced or avoided as a result of Fund-funded projects/programmes – *low emission gender-sensitive transport (sub-indicator)*	IEs/ intermediaries	*Public transport:* - Specifics to be informed by pending MDB/IFI work on transport GHG accounting harmonization; GEF's 2013 transportation project GHG calculation methodology developed by the Institute for Transportation Development Policy (ITDP) Disaggregated by gender. *Vehicle fuels (fuel economy standards):* - [If applicable to Fund investments] methods may be informed by the work of International Council on Clean Transportation (ICCT); and by the work of the Women's Issues in Transportation Committee of the US Transport Research Board.
3.0 Reduced emissions from buildings, cities, industries and appliances	☑ 3.1 *Tonnes of carbon dioxide equivalent (t CO_2eq) reduced or avoided as a result of Fund-funded projects/programmes	IEs/ intermediaries	*Buildings:* Informed by MDB/IFI GHG accounting harmonization work on energy efficiency. *Cities:* Informed by the Global Protocol for Community-Scale Greenhouse Gas Emissions and by the Cities Alliance (currently being developed).

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[3]
	– buildings, cities, industries, and appliances sub-indicator		*Industries:* Informed by MDB/IFI GHG accounting harmonization work on energy efficiency. *Appliances:* Informed MDB/IFI GHG accounting harmonization work on energy efficiency where applicable. Can also draw upon the GEF's GHG accounting for standards and labelling; CLASP's/Lawrence Berkeley National Laboratory's (LBNL) Policy Analysis Modelling System. Gender disaggregation is to be researched for each sector and included where possible.
4.0 Reduced emissions from land use, deforestation, forest degradation, and through sustainable management of forests and conservation and enhancement of forest carbon stocks	☑ 4.1 Tonnes of carbon dioxide equivalent (t CO_2eq) reduced or avoided (including increased removals) as a result of Fund-funded projects/programmes *– forest and land-use sub-indicator*	IEs/ intermediaries	Informed by CIF FIP Indicator 1, pending Fund work on the performance framework for REDD+, the Forest Carbon Partnership Facility Methodological Framework (Dec. 2013), UN REDD and emerging United Nations Framework Convention on Climate Change (UNFCCC) guidance on REDD+. Gender disaggregation is to be researched and included if possible.
	☐ Social, environmental, economic co-benefit index/indicator at impact level		Co-benefit indicator related to GHG reductions/low-emissions development pathways and sustainable development. Specifics to be determined.
Project/Programme Outcomes			
	☐ Number of technologies and innovative solutions transferred or licensed to support low-emission development as a result of Fund support.	IEs/ intermediaries	Might include number of technology transfer licenses, number of facilities created to produce local technologies, and/or projects/programmes that include transfer of technology and innovative solutions that support low-emission pathways.
5.0 Strengthened institutional and regulatory systems for low-emission planning and development	☐ 5.1 Institutional and regulatory systems that improve incentives for low-emission planning and development and their effective	IEs/ intermediaries	Details on this indicator are to be determined. Although this can be informed by GEF Indicator 5, the World Bank's RISE (Readiness for Investment in Sustainable Energy) work, and Bloomberg New Energy Finance (BNEF) Climatescope work, consideration will be made to avoid country and sector-level requirements

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[3]
	implementation		for this indicator. Consideration should be given to what can be measured at different levels (city, regional, etc.) and what changes can be tied to the work of the Fund, either in an attribution or contribution sense.
	☐ 5.2 Number and level of effective coordination mechanisms	IEs/ Intermediaries	Seeks to measure evidence of measures taken for promoting coordination and synergy at the regional and international levels, including between and among relevant agencies and with regard to other multilateral environmental agreements.
6.0 Increased number of small, medium and large low-emission power suppliers	☑ 6.1 Proportion of low-emission power supply in a jurisdiction or market.	IEs/ intermediaries	To be determined by recipient countries. Disaggregated by size of supplier
	☑ 6.2 Number of households, and individuals (males and females) with improved access to low-emission energy sources	IEs/ intermediaries	Informed by CIF SREP 2. Disaggregated by males and females. Disaggregated by urban and rural. To be informed by SE4All. Assumes that it will not be possible to measure improved access from large-grid systems; therefore the data will be linked to off-grid access (e.g., solar panels) and mini-grid systems.
	☑ 6.3 MWs of low-emission energy capacity installed, generated and/or rehabilitated as a result of GCF support	IEs/ intermediaries	Informed by CIF CTF and SREP indicators.
7.0 Lower energy intensity of buildings, cities, industries, and appliances	☐ 7.1 Energy intensity/improved efficiency of buildings, cities, industries and appliances as a result of Fund support.	IEs/ intermediaries	Informed by MDB/IFI GHG accounting harmonization work on energy efficiency; can also be informed by IEA and SE4ALL Global Tracking Framework where relevant. Will need to be calculated sector-by-sector; different methodologies apply to buildings, cities, industries and appliances.
8.0 Increased use of low-carbon transport	☐ 8.1 Number of additional female and male passengers using low-carbon transport as a result of Fund support.	IEs/ intermediaries	Informed by CIF CTF indicator 4, pending work by MDBs and IFIs on transport GHG accounting harmonization. Additional passengers = mode shift To consider underlying reasons for mode shift, such as transit-oriented development Disaggregated by gender.

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[3]
	☐ 8.2 Vehicle fuel economy and energy source as a result of Fund support.	IEs/ intermediaries	Trends in fuel economy by vehicle class (commercial and passenger plus subclasses by heavy/light duty, weight, etc.) and energy source (e.g. hybrid and all-electric vehicles) Focuses on vehicles in the private, commercial and government fleets (not public transport or non-motorized transport options). Details of methodology to be determined: may be by average fuel economy by vehicle class. Informed by work of the International Energy Agency, the International Council on Clean Transportation, and others
9.0 Improved management of land or forest areas contributing to emissions reductions	☐ 9.1 Hectares of land or forests under improved and effective management that contributes to CO_2 emission reductions	IEs/ intermediaries	Informed by work on REDD+ performance framework (currently being developed). Can draw on CIF Forest Investment Program (FIP) indicator guidance, Forest Carbon Partnership Facility Monitoring and Evaluation Framework, UN REDD, and UNFCCC guidance.
Project/Programme Outputs	[Defined for each project/programme on a case-by-case basis.]		
Activities	[Defined for each project/programme on a case-by-case basis.]		
Inputs	[Defined for each project/programme on a case-by-case basis.]		

B.   Adaptation performance measurement framework

12.   The adaptation PMF in Table 2 is aligned with the adaptation logic model. The associated indicators are listed next to their corresponding objective/impact/outcome. The notes provide details of the proposed methodology, disaggregation and equivalency with indicators used by peer funds/agencies.

13.   When applicable, an indicator measuring additional financing from public and private sources on adaptation activities can be tracked and reported during project/programme implementation on a case-by-case basis. This indicator would not serve as a decision-making factor when assessing a funding proposal for adaptation.

14.   An initial methodology for the adopted adaptation core indicator is included in Annex V. Once the Board adopts the additional indicators in the PMF, detailed methodologies, including more specifics on gender, can be identified for these indicators.

Table 2: Adaptation performance measurement framework

☑ = Decided

□ = Noted, but further refinement needed

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[4]
Paradigm-shift Objective			
Increased climate-resilient sustainable development	□ Degree to which the Fund is achieving a climate-resilient sustainable development impact	Secretariat	Proposed assessment based on a combination of quantitative and qualitative information that goes beyond simple aggregation of the results' indicators. Elements to be considered include the overall contribution to sustainable climate-resilient development pathways, the degree to which knowledge and learning are achieved, extent to which the enabling environment is created or enhanced, and extent to which the regulatory framework and policies are strengthened.
Fund-level Impacts			
	☑* **Total Number of direct and indirect beneficiaries; Number of beneficiaries relative to total population**	IEs/ intermediaries	The indicator measures the number of people who have received an input of support, where two dimensions of support are considered: targeted and intensity level. Based on these two dimensions, a direct and indirect category of beneficiaries is identified. See Annex V for the methodology. Disaggregated by gender. *Informed by Adaptation Fund (core-1); CIF PPCR A1.3.*
1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities, and regions	□ 1.1 Change in expected losses of lives and economic assets (US$) due to the impact of extreme climate-related disasters in the geographic area of the GCF intervention	IEs/ intermediaries /country	Disaggregated by vulnerable groups and gender, share of total population. Analysis of loss of life is separate from analysis of economic losses (lives not to be valued). Economic losses will be analysed in relation to the size of economies. *Informed by CIF PPCR A1.2.*
	□ 1.2 Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.)	IEs/ intermediaries	Disaggregated by gender; to consider equitable sharing of benefits. Methodology to consider (e.g., climate-resilient agriculture, sustainable climate-resilient tourism, fisheries, green jobs, etc.) *Informed by Adaptation Fund 6.1, 6.2; LDCF/SCCF 3.*

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Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[4]
	☐ 1.3 Number of Fund-funded projects/programmes that supports effective adaptation to fish stock migration and depletion due to climate change	IEs/ intermediaries	Details to be determined.
2.0 Increased resilience of health and well-being, and food and water security	☑ 2.1 Number of males and females benefiting from introduced health measures to respond to climate-sensitive diseases	IEs/ intermediaries	Disaggregated by health measure, disease Disaggregated by gender *Informed by: n/a.*
	☑ 2.2 Number of food-secure households (in areas/periods at risk of climate change impacts)	IEs/ intermediaries	Disaggregated by male and female-headed households *Informed by CIF PPCR A1.1.*
	☑ 2.3 Number of males and females with year-round access to reliable and safe water supply despite climate shocks and stresses	IEs/ intermediaries	Disaggregated by gender in relation to domestic, agricultural and industrial sources. Disaggregated by male and female-headed households for domestic sources. *Informed by CIF PPCR A1.4.*
3.0 Increased resilience of infrastructure and the built environment to climate change threats	☐ *** 3.1 Number and value of physical assets made more resilient to climate variability and change, considering human benefits (reported where applicable)**	IEs/ intermediaries	Number will be disaggregated by sector, type of asset, action (constructed or strengthened), etc. *Informed by Adaptation Fund (core-3), LDCF/SCCF 2.* To cover assets associated with climate-vulnerable sectors, such as tourism.
4.0 Improved resilience of ecosystems and ecosystem services	☐ 4.1 Coverage/scale of ecosystems protected and strengthened in response to climate variability and change	IEs/ intermediaries	Disaggregated by ecosystem type. To examine how impact on people can be captured. *Informed by Adaptation Fund (core-4); LDCF/SCCF 2.*
	☐ 4.2 Value (US$) of ecosystem services generated or protected in response to climate change	IEs/ intermediaries	*Informed by LDCF/SCCF 2.*
Project/Programme Outcomes			
	☐ Number of	IEs/	Might include number of technology

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[4]
	technologies and innovative solutions transferred or licensed to promote climate resilience as a result of Fund support.	intermediaries	transfer licenses, number of facilities created to produce local technologies, and/or projects/programmes that include transfer of technology and innovative solutions that support climate adaptation and resilience.
5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development	□ 5.1 Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation.	IEs/ intermediaries /country	The indicator measures the institutional and regulatory systems that improve incentives for climate resilience and are accompanied by evidence of their effective implementation. The evidence may be a qualitative assessment (e.g. through a standardized scorecard) of the various strategic plans and documents is needed at regular intervals to observe changes in terms of climate change streamlining and quality. *Informed by Adaptation Fund 7; CIF PPCR A2.1, B2; Adaptation Fund 7.1; LDCF/SCCF 12.*
	□ 5.2 Number and level of effective coordination mechanisms	IEs/ intermediaries	Seeks to measure evidence of measures taken for promoting coordination and synergy at the regional and international levels, including between and among relevant agencies and with regard to other multilateral environmental agreements.
6.0 Increased generation and use of climate information in decision-making	□ Proposed: 6.2 Use of climate information products/services in decision-making in climate-sensitive sectors	IEs/ intermediaries	Disaggregated by stakeholder (government, private sector, and general population). This indicator is qualitative in nature and country-specific. It will require an in-depth analysis and/or a scorecard approach to capture the understanding of the political economy determining decisions. *Informed by CIF PPCR B3*
7.0 Strengthened adaptive capacity and reduced exposure to climate risks	□ Proposed 7.1: Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools, instruments, strategies and activities to respond to climate change and variability	IEs/ intermediaries	This indicator is qualitative and/or quantitative in nature and country-specific. The qualitative aspects will require an in-depth analysis or a scorecard approach to determine the extent of progress. Households: disaggregated by male-headed and female-headed *Informed by CIF PPCR B1*
	□ 7.2: Number of males and females reached by [or total geographic	IEs/ intermediaries	An early warning system is perceived as a composite of four dimensions: (1) knowledge on risks, (2) monitoring and

Expected result	Indicator * = Core	Reporting responsibility (annual reporting)	Notes[4]
	coverage of] climate-related early warning systems and other risk reduction measures established/ strengthened		warning service, (3) dissemination and communication, (4) response capability. Disaggregated by hazard and geographical coverage. Disaggregated by gender. *Informed by Adaptation Fund Core-2, 1.2 and 1.2.1; LDCF/SCCF 2.3*
8.0 Strengthened awareness of climate threats and risk-reduction processes	☑ 8.1: Number of males and females made aware of climate threats and related appropriate responses	IEs/ intermediaries	Disaggregated by gender. *Informed by Adaptation Fund 3.1, 3.2*
Project/Programme Outputs	[Defined for each project/programme on a case-by-case basis.]		
Activities	[Defined for each project/programme on a case-by-case basis.]		
Inputs	[Defined for each project/programme on a case-by-case basis.]		