



## Effectiveness of Climate Finance – How to Enhance the Impact Measurement

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### 1. Introduction and background

**At COP21 in Paris in 2015, the Parties decided to establish a new collective quantified goal (NCQG) for climate finance.** This goal would start at a minimum of USD 100 billion per year, taking into account the needs and priorities of developing countries. In the aftermath of discussions around the NCQG at COP26 in Glasgow, the Parties created an ad hoc work programme for 2022–2024 to facilitate setting the new goal before 2025. Such a target, however, is only truly meaningful if the climate finance investments behind it can reach the impact that is needed for a Paris-aligned development pathway. Hence, recent discussions indicate a consensus among Parties that the new goal will include qualitative aspects in addition to a financial target.<sup>1</sup> This will offer the chance to address certain climate finance challenges faced by developing countries. However, views differ with regard to which aspects a qualitative element comprises and how these are best integrated into the agreement.

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1 Alayza (2023).

**This Policy Brief focuses on the element of effectiveness and its link to the transparency and harmonisation of climate finance<sup>2</sup> reporting, as well as the opportunities for developing countries in this context.** The topic of effectiveness is also used by developed countries as a potential means to introduce conditionalities on access to climate finance regarding the ability to prove the impact or effective use of the finance. However, the brief applies another perspective and shows how transparency and harmonised methodologies are key elements to consider when designing an NCQG that corresponds to the needs of developing countries. In this brief, effectiveness describes the level of impact that is achieved by a climate project in relation to its targets. Meanwhile, it should be noted that other elements such as adequacy, predictability, and avoiding additional burdens on heavily indebted countries are of equal importance.<sup>3</sup> Further criteria that are discussed in scientific and grey literature in the context of the NCQG are country ownership, accessibility, equity, and channelling through a robust governance system.<sup>4</sup>

**To achieve alignment with the Paris Agreement, it is essential to maximise the impact of climate finance in terms of both GHG emissions reduction and enhanced climate resilience for beneficiaries.**<sup>5</sup> As climate finance resources are scarce compared to the estimated needs of developing countries,<sup>6</sup> effectiveness and efficiency should be of interest to all Parties under the NCQG and must be at the forefront of a discussion around how to ensure a high quality of climate finance flows in the context of the NCQG. Although the term 'quality of climate finance' may also be related to the type of financial instrument, in the context of this brief it refers to the impact that can be achieved with a certain amount of resources. In consequence, it requires a thorough assessment of outcomes within climate finance projects, where effectiveness is commonly measured by two key indicators:

- **Mitigation:** Effective climate finance should help reduce emissions measured in GHG emissions reduced or avoided (tCO<sub>2</sub>eq); and
- **Adaptation:** Climate finance should enhance communities' ability to cope with climate impacts and measure the number of beneficiaries who gain enhanced resilience to impacts such as extreme weather events or rising sea levels.

These indicators, widely used by institutions like the Green Climate Fund (GCF), should ideally be recorded in a standardised manner before and after project implementation, including long-term tracking, to ensure accurate tracking of climate finance effectiveness. Since in complex environments, such as climate change mitigation and adaptation, using only one indicator might be insufficient for impact measuring, the related (sub-)indicators are important and are often used as well. Examples of these include sectoral indicators (such as energy indicators in terms of megawatts, etc.) or quantification of adaptation benefits. The latter is currently not required for monitoring adaptation impacts but could help improve the impact assessment in future.<sup>7</sup> Overall, accountability based on solid impact measuring is essential for ensuring that resources are directed towards measures that secure the greatest impact, while also addressing the needs of the most vulnerable countries and communities.

**The NCQG will likely involve commitments from Parties to the Paris Agreement, with funding amounts in the billions of dollars. However, mere disbursement of funds is not enough; the funds must translate into tangible climate action outcomes. Ensuring that climate finance is effective in delivering these outcomes justifies the investment and builds trust among all Parties.** In terms of cost-effectiveness or efficiency, a common metric used for mitigation projects is the amount of GHG mitigation achieved per unit of project funding, often expressed as the cost per CO<sub>2</sub>eq reduced. This metric helps to assess the financial efficiency of a project by comparing the funds invested to the environmental benefits gained. With regard to adaptation, efficiency indicators are not common, as local contexts and baselines vary significantly, impeding the fair comparison of investments.<sup>8</sup> Mitigation-focused projects, however, which achieve

2 Climate finance refers to all public financial resources that are provided by developed countries to developing countries (non-Annex I countries) for activities aiming to mitigate or adapt to the impacts of climate change.

3 Argueta et al. (2022).

4 Argueta et al. (2021); Alayza (2023); Cozzi et al. (2022).

5 Although loss and damage is foreseen to play a role in climate finance, this policy brief limits its scope to the analysis of the fields of mitigation and adaptation.

6 The Independent High-Level Expert Group on Climate Finance (IHLEG) concludes that around USD 2.4 trillion in investments in developing countries per year will be needed by 2030 across the priorities of a just energy transition, adaptation and resilience, loss and damage, and the conservation and restoration of nature (IHLEG 2023). Furthermore, India, as well as the Arab and the African groups, brought their proposals for a new dollar amount to the table in Bonn this year: more than USD 1 trillion a year for the five years from 2025 (Climate Home News 2024).

7 There is currently no defined set of methodologies for estimating and monitoring adaptation benefits. However, the African Development Bank is leading the development of the Adaptation Benefits Mechanism (ABM), a results-based mechanism aiming at mobilising public and private sector finance for adaptation. See: <https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/adaptation-benefit-mechanism-abm>

8 Micale, Tonkonogy, & Mazza (2018).

a higher reduction in GHG emissions for a lower cost, are considered more cost-effective. This is therefore a crucial factor in evaluating and prioritising climate finance investments. The GCF and the Mitigation Action Facility, for instance, consider cost-effectiveness as a relevant factor during project evaluation. By focusing on these measures, finance providers and stakeholders can better understand the tangible outcomes of provided climate finance and ensure that resources are allocated to those projects that deliver the most significant impact in return for the money spent, in the framework of balanced regional and sectoral investments. However, climate projects (or project investments in general) might be more costly in some developing countries compared to others for structural reasons. A cost-effectiveness criterion on its own would prevent climate projects in such countries, although they could have a great impact. Hence, cost-effectiveness should not be looked at in isolation but rather in a multicriteria context, including co-benefits, as some key barriers to investments may be overlooked otherwise. Also, cost-effectiveness or efficiency as applied by climate finance funds, such as the GCF, the Mitigation Action Facility, or others, should not be confused with the marginal cost of the interventions, such as the marginal abatement costs of the promoted technologies of mitigation measures. For many projects and funds, the current challenge is to obtain valid aggregated figures for mitigation and adaptation effects. That is why, from the current perspective, the efficiency calculation (i.e. USD/tCO<sub>2</sub>eq or EUR/tCO<sub>2</sub>eq), at portfolio level and in particular for technical cooperation, will not lead to meaningful values. It cannot sufficiently take into account potential development co-benefits (most projects and financing favour more than one objective) as well as indirect impacts.<sup>9</sup>

**Comparability is often lacking between climate finance sources and projects because the actual amount of emission reduction achieved, and hence the cost-effectiveness, is estimated using different methodologies or individual approaches.** This discrepancy arises from the use of varying calculation methods, baseline scenarios, and assumptions across different projects and funding sources. For instance, one project may estimate emission reductions based on theoretical models or projections, while another may use direct measurements or different criteria for establishing baseline emissions. As a result, it becomes challenging to accurately

compare the effectiveness of different projects or funding sources, even when they are aimed at similar objectives.

**This lack of standardisation can lead to inconsistencies in reporting and difficulty in assessing the overall impact of climate finance on a broader scale.** Without a unified approach for estimating emission reductions, it becomes harder to determine which projects are truly delivering the most significant benefits. This issue underscores the need for more harmonised and transparent methodologies to ensure that comparisons across projects and funding sources are meaningful and that climate finance is effectively contributing to global climate goals. For developing countries, harmonised, streamlined, and transparent methodologies and reporting lead to lower transaction costs in the planning and implementation of projects, which increases the actual impact of investments on the ground. Adequate methodologies for tracking the impacts of adaptation and cross-cutting projects may also lead to higher financing in adaptive measures and building resilience.

**This CFAS Policy Brief will closely examine key climate finance sources and the various measures and methodologies currently employed to track and measure the impact of climate finance, looking at the incoherences of emission reduction monitoring and tracking as well as the difficulties in comparing the effectiveness and efficiency of adaptation initiatives.** The brief will analyse the advantages and disadvantages of existing GHG accounting methodologies,<sup>10</sup> identifying key gaps and challenges for common measurability and comparability. It will explore potential areas for improvement, particularly in the harmonisation of these methodologies, to enhance comparability and reliability across different projects and funding sources. Additionally, the brief will offer recommendations on how these findings can be incorporated into a COP29 decision on the NCQG, ensuring that future climate finance tracking and impact measurement are more robust, consistent, and aligned with global climate objectives. Hence, the report primarily focuses on the effectiveness of climate finance, acknowledging that other qualitative aspects are equally critical. It delves into the current availability of clear and measurable impacts and results, assessing whether the intended outcomes are being achieved. And it analyses specifically the

<sup>9</sup> A similar efficiency indicator for adaptation-focused interventions is not applied by any climate fund at the moment. If appropriate, cost-benefit analyses are recommended for investments that enhance local resilience (e.g. by the GCF) (see section 2.1).

<sup>10</sup> Methodologies are systematic tools designed to address particular aspects of projects and interventions, such as calculating GHG emissions from specific sources. These approaches are essential for quantifying the amount of emission reductions achieved, establishing baselines, and facilitating the ongoing monitoring of mitigation efforts.

effectiveness and monitoring of the GHG emission reductions of climate finance projects and development cooperation projects, covering both financial cooperation and technical cooperation.

## 2. Existing methodological approaches to measuring the impact and effectiveness of climate finance

This chapter provides a comprehensive assessment of the existing frameworks, methodologies, and standards used to measure and report the climate impact of key climate finance sources. It offers an overview of various approaches to impact measurement, including both positive and negative impacts. The chapter examines the International Financial Institution (IFI) Framework for a Harmonised Approach to Greenhouse Gas Accounting,<sup>11</sup> as implemented by multilateral development banks (MDBs), the Clean Technology Fund (CTF),<sup>12</sup> and the methodologies adopted by key bodies under the UNFCCC, such as the GCF, the Global Environment Facility (GEF), and the Adaptation Fund (AF). It also considers other significant providers, including the Mitigation Action Facility, and bilateral initiatives like Germany's International Climate Initiative (IKI).

In addition to outlining these frameworks, the chapter offers a critical evaluation of their pros and cons, identifying key gaps and challenges that arise because of differences and inconsistencies in how these methodologies are applied. The challenges of aligning the evaluation of climate impact with the allocation of finance are discussed, particularly in terms of tracking both financial flows and their corresponding impacts. Finally, the chapter explores the difficulties of achieving consistency across different reporting standards and the implications for accurately assessing the effectiveness of climate finance.

### 2.1 Overview of approaches

**Currently, multilateral climate funds, development banks, and contributors have established varying monitoring and reporting requirements for their project portfolios, reflecting their distinct objectives, operational frameworks, and reporting standards.** These differences can significantly influence how climate impacts are measured and reported. For example, certain MDBs operating under the IFI framework mandate detailed, quantitative metrics for greenhouse gas (GHG) emissions reductions. Projects funded by these entities must follow specific methodologies for calculating and reporting emissions reductions, ensuring consistency and rigour in data reporting. Other development banks or climate funds apply their own metrics or do not prescribe the application of a certain methodical approach.

#### Mitigation

**Internationally, there are three authoritative methodological standards that have often been used to calculate emissions and emission reductions at project level: first, the 2006 IPCC Guidelines for National Greenhouse Gas Inventories from the Intergovernmental Panel on Climate Change (IPCC, 2006, and its 2019 adaptation); second, the methods of the Clean Development Mechanism (CDM) under the Kyoto Protocol; and third, the Greenhouse Gas Protocol (GHG Protocol Standards, 2023) from the World Resources Institute and the World Business Council for Sustainable Development.** The methods and tools under these standards are generally applicable, meaning they are suitable for almost all sectors and mitigation activities. At the same time, the methods are considered valid, transparent, and conservative. For example, the German government's IKI requires in its handouts on the Standard Indicator SI1 (mitigation) that all selected data sources and methods for determining emission reductions (including assumptions and emission factors) must comply with international standards and refers to the corresponding sources.<sup>13</sup> Similar references are made in other indicator definition sheets, such as those by the GCF or the Mitigation Action Facility.<sup>14</sup>

11 IFIs – Harmonization of Standards for GHG accounting: <https://unfccc.int/topics/mitigation/resources/ifis-harmonization-of-standards-for-ghg-accounting>

12 The Clean Technology Fund (CTF), together with the Strategic Climate Fund, is part of the Climate Investment Funds (CIF) launched by nine donor countries and six multilateral development banks in 2008 upon the initiative of the G8 and G20. The trustee is the World Bank Group.

13 IKI (2024, p. 57): IPCC 2006 Guidelines for National Greenhouse Gas Inventories and their Refinement from 2019; Greenhouse Gas Protocol Standards (particularly relevant is the Project Accounting Standard, and to a lesser extent the Policy and Action Standard); Clean Development Mechanism (CDM) methodologies (also relevant for forestry projects under REDD+); methodologies adopted under the mechanism established by Article 6, paragraph 4, of the Paris Agreement (still under development); methodologies provided by recognised voluntary carbon market standards such as the Gold Standard or Verified Carbon Standard under Verra (often directly related to CDM methodologies); other helpful and recognised tools, such as the UN FAO's Ex-Ante Carbon-balance Tool (EX-ACT) (relevant for activities in the Agriculture, Forestry, and Other Land Uses (AFOLU) sector).

14 GCF (2022); Mitigation Action Facility (2024).

**In addition, in recent years the IFIs have developed a harmonised approach to GHG accounting at project level: the IFI Framework for a Harmonised Approach to Greenhouse Gas Accounting.**<sup>15</sup> The framework, as implemented by MDBs, provides a standardised methodology for accounting and reporting greenhouse gas emissions and emission reductions across various projects and institutions. This framework aims to create consistency in how emission reductions are measured and reported, facilitating a more accurate assessment of the climate impact of different investments, and is based on the GHG Protocol Standards. By adopting a unified approach, MDBs want to ensure that their climate finance initiatives are evaluated on a comparable basis, improving transparency and accountability. The harmonised framework should help mitigate discrepancies in emissions accounting, supporting more effective tracking of progress towards climate goals and enhancing the credibility of reported outcomes, ultimately contributing to more informed decision-making and more strategic allocation of resources. Where possible, absolute and relative emissions are recorded for projects with significant emissions (i.e. more than 20,000 tonnes of CO<sub>2</sub>e per year).<sup>16</sup> Absolute emissions are defined as the average annual emissions caused by a project. Relative emissions (or emission reductions broken down into reduced emissions, avoided emissions, and GHG sequestration) are defined as the difference in emissions when a project is implemented ('With project') compared to a baseline scenario ('Without project'). The assessment is carried out ex-ante. In addition, financial cooperation uses various sector-specific GHG calculation tools (e.g. for energy, mobility, water, etc.).

**In contrast, other funds, such as the GEF, the Climate Investment Funds (CIF), and the GCF, do not prescribe standardised metrics for GHG mitigation.** Instead, they allow for greater flexibility in the methodologies used by projects, leading to varied approaches in estimating and reporting mitigation outcomes. This flexibility can accommodate diverse project contexts but may also introduce variability in how results are reported. For instance, if the Accredited Entity (AE) of a GCF project is a financial institution that has set up its GHG accounting approach in accordance with the IFI's

harmonised approach,<sup>17</sup> this will likely be applied. However, many other AEs, including many direct-access entities, have not adopted the IFI's harmonised framework.

**Additionally, some bilateral funds and facilities require a common reporting framework but permit projects to select their own methodological approaches for estimating mitigation outcomes, provided that the chosen method is robust and transparently described.** This approach aims to balance consistency in reporting with the flexibility needed to address specific project conditions. In this case, the climate finance providers refer to established methodologies to be used, like the GCF references listed above. Good examples are the Mitigation Action Facility and bilateral initiatives like Germany's International Climate Initiative.<sup>18</sup> Further details of the different approaches for estimating and reporting the climate mitigation impact are summarised in Table 1 in Annex 1.

### Adaptation

**For adaptation-focused projects, where outcomes are often closely tied to local conditions, neither a single indicator nor a uniform set of indicators is available or applied across all climate finance providers, as its definition is inherently more challenging compared to mitigation efforts.**<sup>19</sup> Local contexts and baselines vary significantly, making it harder to apply standardised indicators.<sup>20</sup> Nevertheless, there remains significant value in comparing measured results and developing common frameworks or metrics, particularly for assessing collective progress<sup>21</sup> and sharing best practices in adaptation finance.<sup>22</sup> At project level there are some indicators, approaches, targets, and metrics currently used in adaptation finance,<sup>23</sup> such as the World Bank's Resilience Rating System.<sup>24</sup> Also, climate finance funds commonly use a long list of adaptation and resilience-related indicators. In this context, Table 2 in Annex 2 shows essentially two things. First, the frameworks of the AF and the GCF have some overlaps in their main indicators as well as in the respective thematic areas of the indicators, showing the potential for establishing common frameworks of the UNFCCC vehicles. Second, the formulation of indicators and structure

15 IFI (2021).

16 The threshold can be set individually by the financial institution.

17 Incl. ADB, AFDB, EBRD, AFD, IDB, EIB, KfW, WBG, NDF, and NEFCO

18 Mitigation Action Facility (2024); IKI (2024).

19 Cichočka & Mitchel (2022).

20 Micale, Tonkonogy, & Mazza (2018).

21 For example, the UAE Framework for Global Climate Resilience, which sets the framework and targets for the global goal on adaptation, and for which indicators are going to be developed. See IISD (2024).

22 Cichočka & Mitchel (2022).

23 UNFCCC (2022).

24 World Bank Group (2024).

of both indicator frameworks is significantly different in other parts, pointing to the need for more coherence.

**There is still a diverse array of strategies used to track adaptation effectiveness across different finance providers.<sup>25</sup>**

A discussion about how adaptation finance indicators can be standardised or defined in a way that facilitates consistent and aggregated reporting is ongoing. Addressing these challenges could improve transparency and comparability, fostering better coordination across stakeholders in global adaptation efforts. Further details of different approaches for estimating and reporting the climate adaptation impact are summarised in Annex 2.

**2.2 Discussion of commonalities, differences, gaps, and challenges**

**The analysis of how institutions and climate finance funds account for their mitigation and adaptation benefits identifies some general patterns but also important differences.** Although MDBs typically apply approaches that are aligned with the harmonised GHG accounting standards of the IFI framework, climate finance funds do not provide strict guidance on the methodology to project proponents. Some commonalities and differences are summarised below.

**Transparency of the project portfolio for which emission reductions are estimated: The transparency of climate projects' impact on mitigation and adaptation projects is very limited under international climate finance sources. Mitigation and adaptation benefit estimations and results are in many cases not disclosed, and information on how the assessment has been executed is missing.** For instance, between May 2022 (Board Meeting B.32) and July 2024 (Board Meeting B.39), the GCF has approved 43 project proposals that require reporting on mitigation impacts (8 mitigation and 35 cross-cutting projects). There are significant gaps in transparency with regard to the respective GHG emissions reduction estimations. Of these 43 projects, 24 proposals, or 56% (7 mitigation and 17 cross-cutting projects), do not publicly provide any detailed explanation of the emission reduction estimation method or the underlying calculation.<sup>26</sup> Notably, 4 of these projects explicitly state that no project

information is confidential. In addition, 16 proposals even fail to publicly disclose any annexes, except on environmental and social safeguards and gender reporting. Furthermore, 10 proposals<sup>27</sup> that do not offer GHG emissions reduction assessments are large-scale projects (USD >250 million), for which transparency standards should be even higher. Given the limited accessibility of the impact estimations, the GCF has low transparency and accountability in relation to its financing. This also applies to adaptation projects. In the same time frame since 2022, the GCF Board approved 18 full funding adaptation projects. For 8 of these projects (44%),<sup>28</sup> no clear and transparent adaptation beneficiary impact estimation is provided. Of the remaining 10 projects that provide the estimation, only 6 disclose in-depth details of the applied estimation methodology. Figure 1 provides an overview of the transparency analysis of approved proposals by the GCF.

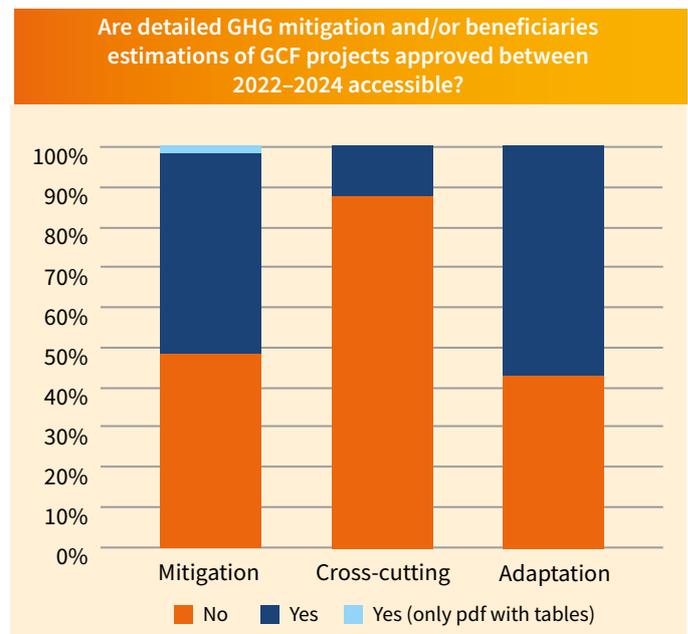


Figure 1: The GCF's incoherent disclosure – an analysis of approved proposals between B.32 – B.39 / Source: Compiled based on GCF funding proposal analysis and Board meeting report.

**Project attribution and determination of cost-effectiveness: Project attribution is differently applied by donors and providers (pro-rata estimation).** As per the IFI framework for a harmonised approach to GHG accounting, each IFI is committed to accounting for the GHG emissions and emission reductions of direct investment projects that it finances. For co-financed operations, the GHG accounting

25 Cichocka & Mitchel (2022).

26 As per the GCF Integrated Results Management Framework, the assessment of GHG emission reductions and their monitoring and reporting needs to be provided in an annex to the funding proposal and is mandatory for mitigation and cross-cutting projects.

27 FP186, FP189, FP190, FP195, FP197, FP204, FP212, FP223, FP225, FP242.

28 FP205, FP207, FP208, FP215, FP216, FP220, FP229, FP234.

result is typically allocated to each institution as per the share of the entire financing amount provided by all Parties involved (pro-rata). In comparison, climate funds such as the GCF or the Mitigation Action Facility do not apply a pro-rata approach. In turn, the IKI does apply an investment share to its direct mitigation impact. The GEF Results Measurement Framework seeks to capture core indicator and sub-indicator values to which the GEF projects have contributed; however, project teams are not required to determine the portion of results attributed to GEF financing.<sup>29</sup> This shows a variety in the attribution of impact and corresponding cost-effectiveness (efficiency) determination (e.g. USD/tCO<sub>2</sub>eq), which may result in inaccuracies and double-counting issues.

**Direct and indirect impact assessment: One main difference in the approaches is the accountability for emission reductions stemming from the indirect impacts of the project and programmes.** For instance, in accordance with the general methodologies of the GEF and its Scientific and Technical Advisory Panel, the GHG emission reduction quantification approach under the GEF differentiates between lifetime direct GHG emissions mitigated and lifetime indirect GHG emissions mitigated (see Figure 2). *Lifetime direct GHG emissions mitigated* are attributable to (i) investments financed during the project’s supervised implementation period or (ii) investments that are implemented after the project’s period but supported by financial facilities or regulatory interventions introduced by the project. For example, financial facilities such as partial credit guarantee facilities, risk mitigation facilities, or revolving funds will remain in operation after the project ends. The emissions mitigated are totalled over the respective lifetimes of the investments. *Lifetime indirect GHG emissions mitigated* are those attributable to the long-term outcomes of project activities that remove barriers, such as capacity building, innovation, and catalytic action for replication. Project components yielding regulatory and policy reform often lead to indirect GHG emission reductions. The World Bank, the CTF, and the Mitigation Action Facility also ask the project for separate reporting on indirect GHG emissions reduction, for example, as a result of replication from direct emissions reduction.<sup>30</sup>

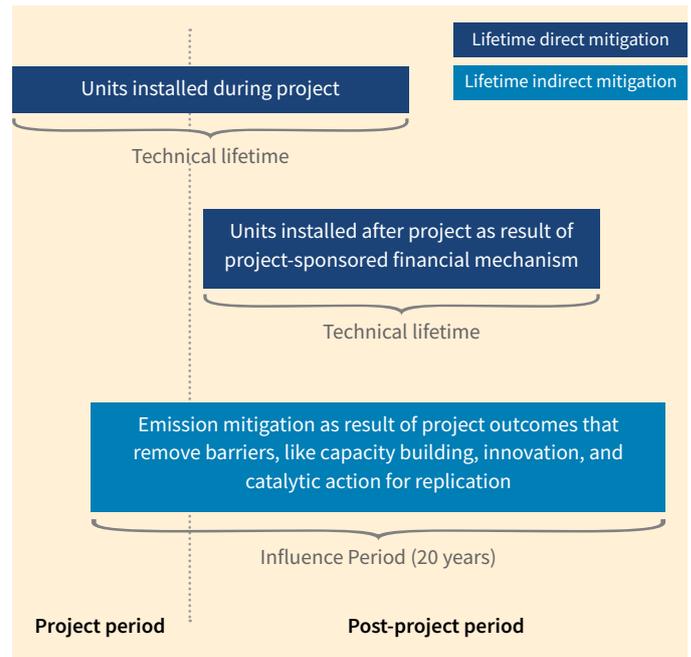


Figure 2: Example definition of the direct and indirect GHG mitigation potential

A similar argument may apply to the impact assessment of adaptation interventions. Also, with regard to adaptation indicators, harmonisation of approaches in terms of direct and indirect impacts, such as direct and indirect beneficiaries, is needed. Not only does the distinction between direct and indirect beneficiaries differ between institutions, but also the consideration of co-benefits of adaptation measures as indirect effects is treated differently. The scope of project-level mitigation and adaptation impacts is typically limited to the estimation and tracking of direct impacts resulting from financial interventions and investments, such as for projects supported by the GCF or MDBs. These financial institutions do not always consider or account for ‘indirect’ impacts, focusing solely on the measurable outcomes directly linked to their financial contributions and project activities. As a result, broader or secondary effects of projects may remain unquantified in official reporting. To date, only limited coverage of project-level mitigation potential related to technical cooperation exists. The GEF, the Mitigation Action Facility and the IKI are requesting that project proponents also estimate their indirect impact and the resulting emission reduction potential. The CIF asks for indirect GHG emissions reduction, for example as a result of replication, but without clear guidance on how this should be accounted for. Due to key challenges related to data availability, accountability, and missing methodologies, GHG emissions and emission reductions from technical

29 GEF (2022).  
30 CIF (2015).

cooperation are not commonly tracked and only to the same extent covered by the monitoring and reporting procedure. Hence, most of the emissions and emission reductions captured that result from climate finance projects are related to direct investments in activities.

**Methodological differences: GHG emissions and emission reductions can be categorised into three major areas (scope 1, scope 2, and scope 3 emissions),<sup>31</sup> which are set out in the GHG Protocol and have been further specified by the IFI Technical Working Group on Greenhouse Gas Accounting.** Nevertheless, a common definition of what ‘relevant’ emissions and projects are, for example grey emissions (embodied carbon) in buildings, is missing across finance providers. In general, the reduction or avoidance of GHG emissions results from the comparison of the baseline emissions (reference case emissions) to the project scenario emissions, including the emissions caused by the project.<sup>32</sup> In this case, only the expected net reduction in GHG must be determined. However, in order to achieve a steady reduction in absolute emissions (carbon footprint) towards net zero in accordance with the Paris Agreement, non-mitigation projects should also record (and minimise) their absolute emissions in a standardised manner after project implementation (as suggested by the IFI’s Framework for a Harmonised Approach to Greenhouse Gas Accounting), including relevant scope 3 emissions.

**Evaluation of real impact and variations in reporting practices: The timing of the assessment is predominantly focused on ex-ante evaluations, whereby the estimated mitigation and adaptation impacts of a project are determined before its implementation, often based on projections made at the proposal stage.** There is generally limited access to ex-post evaluations conducted to assess the actual impact of a project once it has been completed. Hence, it is difficult to judge if there is a gap between the promises made during the proposal phase and the real outcomes. Additionally, it often remains unclear for how long the estimations are intended to apply – whether only for the duration of the project’s funding or for its entire life cycle, including the decommissioning of equipment or infrastructure. Also, if ex-ante impact assessments include lifetime emission reductions, it is likely that there will be no monitoring and

evaluation or accountability beyond the duration of the project that can ensure these reductions are being realised. As a result, there can be significant differences between ex-ante estimations and actual impact once a project is implemented, which means there can potentially be an overestimation of the climate impact of these projects and programmes. This has been the case in the GCF, where some ex-post assessments have had to correct expected impacts. This ambiguity can affect the accuracy and relevance of impact assessments. In terms of quality assurance, a third-party review of the assessments is typically neither applied nor foreseen, raising concerns about the objectivity and rigour of the evaluation process.

**The differing application of accounting methods create challenges in achieving comparability and coherence in climate finance impact reporting.** GHG and adaptation accounting methods currently differ across climate finance providers, which complicates efforts to aggregate data and evaluate the overall impact of climate finance initiatives across various projects and donors. This leaves a margin of uncertainty for any efforts trying to compare finance providers on a like-for-like basis.<sup>33</sup> Only a few finance providers – other than those discussed above – make information on their individual mitigation projects systematically and publicly available.<sup>34</sup> To enhance transparency and the effectiveness of monitoring climate impacts stemming from climate finance, there is a growing need for more harmonised standards and practices in monitoring and reporting, which would facilitate better alignment, comparability, and accountability in tracking climate finance impacts.

### 3. Strengthening climate impact tracking through harmonised and transparent practices

This chapter discusses ways forward for impact reporting in climate finance and development cooperation. It offers insights into the way in which enhanced harmonisation of methodologies and transparent communication of impacts could enhance the reliability and comparability of climate impact measurements across various funding sources. Above all, international collaboration among organisations and stakeholders should be fostered to share best practices,

31 The concept of scope in emissions accounting has been developed in the context of estimating absolute emissions. For projects or investments that aim for emission reduction, hence, the absolute emission of all three scopes with and without the project/investment are compared.

32 For example, if diesel buses are replaced by modern electric buses, the potential emissions from the electricity consumption, if any, must be considered as project emissions.

33 Cozzi et al. (2022, p. 23).

34 Cozzi et al. (2022, p. 23).

experiences, and lessons learnt. Such collaboration would contribute to the continuous improvement and refinement of harmonised standards and transparent reporting. The IFI cooperation is a good starting point, but efforts could be extended, for example, to all AEs and implementing organisations at the GCF and the GEF.

### 3.1 Harmonisation of impact accounting methodologies

**To reduce inconsistencies, harmonised accounting practices and reporting standards are needed.** Harmonisation of climate impact accounting – that is, GHG emissions, emission reduction, and adaptation benefits estimation – requires aligning and standardising methodologies, protocols, and reporting requirements to ensure consistency, comparability, and accuracy across different projects, instruments, and target sectors within the development cooperation. The objective would be to create a unified and transparent approach for GHG accounting and adaptation benefits for both direct and indirect impacts. The IFIs and initiatives like the Partnership for Carbon Accounting Financials can serve as good practice examples for achieving harmonisation for direct mitigation impacts. Establishment of a working group of climate finance providers and recipients, perhaps jointly with the IFI working group, would be required to discuss and agree on a common framework. Important steps towards a harmonisation effort are described below.

**Across providers and climate finance sources, an agreement is needed on standardised indicators for GHG emissions and adaptation benefits estimation.** Currently, some projects and funding sources use more conservative estimates based on stringent baseline scenarios, whereas others may adopt more optimistic assumptions, leading to varying results. Standardised approaches must include definitions of boundaries, tiered data approaches, and data collection and reporting protocols that are recognised and accepted globally. These methodologies should be based on the best available science and consider international standards such as the GHG Protocol, the CDM methodologies, and the IPCC Guidelines for National Greenhouse Gas Inventories. Some lessons learnt can be derived from the efforts of the

GCF's Integrated Results Management Framework, the IFI approach, and initiatives like the Partnership for Carbon Accounting Financials, which provides a standardised approach for financial institutions to measure and disclose their emission reductions and the carbon footprint of their investments. Measuring adaptation impacts for adaptation projects differs even more across funding sources. Adaptation impacts are subject to a large set of different factors and local characteristics that go beyond measuring the number of beneficiaries. The challenge of a harmonised framework will be to agree on a set of indicators and standards that capture the whole complexity of adaptation benefits.

**To enable a possible statement on effectiveness and cost-effectiveness at the project portfolio level, all mitigation and adaptation effects should be recorded as far as possible, divided into direct and indirect effects.** In principle, the most comprehensive possible recording of climate impacts, adaptation benefits, emissions, and emission reductions resulting from direct and indirect development cooperation impacts should be mandatory for climate finance projects. Due to the methodological challenges and differences between indirect and direct impacts, a distinction should be made between these impacts in both recording and communication: as direct and indirect effects are determined on the basis of different premises, the values must be reported separately and may not be aggregated to form a total.

**To date, mainly the emissions and emission reductions resulting from direct impacts have been monitored for climate finance and development cooperation projects by implementing agencies and funding recipients. Efforts should be made to systematise and harmonise donor requirements for the assessment of emissions not only from direct but also from indirect impacts.** The issue of direct and indirect impacts often becomes entangled with complex boundary questions, which carry a significant political dimension. Accordingly, it becomes crucial to differentiate between emissions from direct and indirect impacts. This distinction is essential for transparent and accurate assessments, as it helps avoid confounding factors that could skew the results. By addressing these concerns and harmonising climate finance providers' approaches, the accuracy and reliability of climate impact results can be enhanced, facilitating

more effective decision-making processes in development cooperation. The aim should be to monitor, for instance, GHG emissions from direct and indirect impacts of projects as comprehensively as possible, even if they are to be assessed differently. In accordance with the GHG Protocol (scope 3, category 15), it is recommended that emissions from direct impacts from investment projects are recorded and reported on a pro-rata basis, which has also been implemented accordingly by most institutions reviewed.

**Finance providers (bilateral, multilateral, and dedicated multilateral climate funds) should use standardised definitions and terminology, for example with reference to the definitions in the GHG Protocol and the IFI's Framework for a Harmonised Approach to Greenhouse Gas Accounting.**

Besides the potential emission reduction of climate finance projects, all absolute emissions after project implementation should be standardised, measured, and reported to meet the net zero target. It would make sense to harmonise the definition of absolute emissions (carbon footprint) with the recording of project emissions for all corresponding projects. The remaining GHG emissions should be integrated into the financial evaluation of project proposals. This would allow for an internalisation of the related climate externalities. By assigning a relevant price to such emissions, organisations and (climate) finance providers are incentivised to shift their portfolios towards low or zero GHG impacts. This would help them to make more informed decisions about resource allocation. Moreover, the use of a price for carbon in economic analysis (as proposed and partially implemented by the World Bank Group<sup>35</sup> and the European Bank for Reconstruction and Development<sup>36</sup> as a 'shadow price') not only fosters environmental responsibility but also drives the mainstreaming of climate change considerations into everyday operations. This approach could catalyse a significant shift towards scaling up climate action across financial cooperation.

**Harmonised and streamlined methodologies and reporting lead to lower transaction costs in the planning and implementation of projects.** First, less financing is needed for the services of project preparation and reporting by external partners, hence a higher share of project resources is available for impactful investments on the ground. This is particularly relevant in the context of developing countries with very limited

capacities, such as least developed countries and small island developing states. In the context of the NCQG, this would build trust between Parties that finance is producing the promised results. Second, harmonised and streamlined approaches make it easier for national institutions to build the capacity for covering such project preparation and reporting tasks in-country for multiple donor agencies, which, in consequence, leads to the overall strengthening of national and regional institutions.

**A harmonised methodological approach for accounting practices would enhance the comparability of climate finance effectiveness.**

As analysed in Section 2, the actual climate impact is estimated using varying methodologies and individual approaches, formats, and levels of disclosure policies between different climate finance sources and projects. In turn, a commonly accepted standard for emissions reduction accounting would benefit the comparability and uniformity of project-reported outcomes (similar to what had been established under the CDM), as projects would need to use the same criteria. Additionally, more comprehensive judgements on climate finance effectiveness at the project level would be facilitated.

### 3.2 Transparency of impact estimations

**Transparency and accountability are critical components in ensuring the effectiveness of the NCQG's climate finance initiatives. If we want the financial resources allocated to climate projects under the NCQG to yield tangible benefits, it is essential to have clear, measurable estimates of the impact these projects (are expected to) achieve.**

Promoting transparency holds all Parties accountable for how funds are used, ensuring that they contribute to the stated climate goals, as all stakeholders (countries, organisations, and civil society) can track and compare how effectively funds are used. Without transparent, data-driven projections and results, it becomes difficult to assess whether funds are being used efficiently or to what extent they contribute to mitigating climate change or fostering climate resilience. Common transparent frameworks enhance accountability, not only enabling stakeholders and Parties to track progress but also allowing them to identify challenges and make necessary adjustments

35 World Bank Group (2017).

36 EBRD (2020).

to maximise the impact of climate investments. By adopting a clear framework for evaluating project impact, the NCQG can ensure that its climate finance is directed towards the most impactful initiatives, promoting sustainable development while addressing the urgent global need for climate action. This approach enhances trust among finance providers and recipients and encourages collaboration across sectors, driving collective progress towards climate goals.

**Transparently measuring the effects of investments is crucial for understanding how finance translates into real impact.** Climate finance effectiveness should be assessed based on its ability to (i) mitigate emissions, contributing to the global target of limiting temperature rises to well below 1.5°C, and (ii) protect vulnerable populations and help them adapt to climate change impacts such as sea-level rises, extreme weather, and water scarcity. Only transparent and harmonised frameworks, including consistent baseline setting and implementation of rigorous verification processes, can ensure that resources are being allocated efficiently to maximise impact on the ground. Transparent information and learnings ensure that decision-makers can prioritise projects that deliver the greatest climate benefits per dollar spent. This also helps ensure better financial planning and optimisation of funds for both mitigation and adaptation efforts.

**Enhanced transparency requires clear documentation of the assumptions, methodologies, and data sources used in climate impact estimation. This documentation should be easily accessible to stakeholders for validation and verification purposes,** such as by being made available on the climate finance provider's webpage for each funded project.

Also, annual monitoring results and updated estimations should be made available to allow a reality check compared to what has been promised at the proposal stage of each project or programme. There are currently significant gaps in transparency with regard to the estimation of GHG emissions reduction and adaptation beneficiaries of climate finance projects and programmes.

**Ideally, a standardised and transparent practice should emerge among climate finance providers that makes information on ex-ante and ex-post climate impacts easily accessible for all absolute and relative results from development cooperation impacts on a project basis.** According to this practice, project emissions should first be estimated ex-ante and, if possible, be supplemented by annual monitoring and reporting during implementation (ex-post) or corrected if necessary. If annual recording is not possible (e.g. because of data availability, etc.), an ex-post evaluation should at least be carried out at the end of the project, ideally in combination with an updated estimate over the remaining (technical) lifetime. Hence, a standardised ex-ante assessment and ex-post review at the end of the project term is recommended. This would allow the estimates made at the beginning of the project term to be validated and the estimate for the period after project implementation to be reviewed and adjusted if necessary. This step towards greater transparency could significantly improve the understanding of the climate impacts of projects and promote more informed decision-making, as the ex-post review validates and, if necessary, corrects the anticipated climate impacts of the project. Figure 3 displays guidance on reporting over the project cycle.

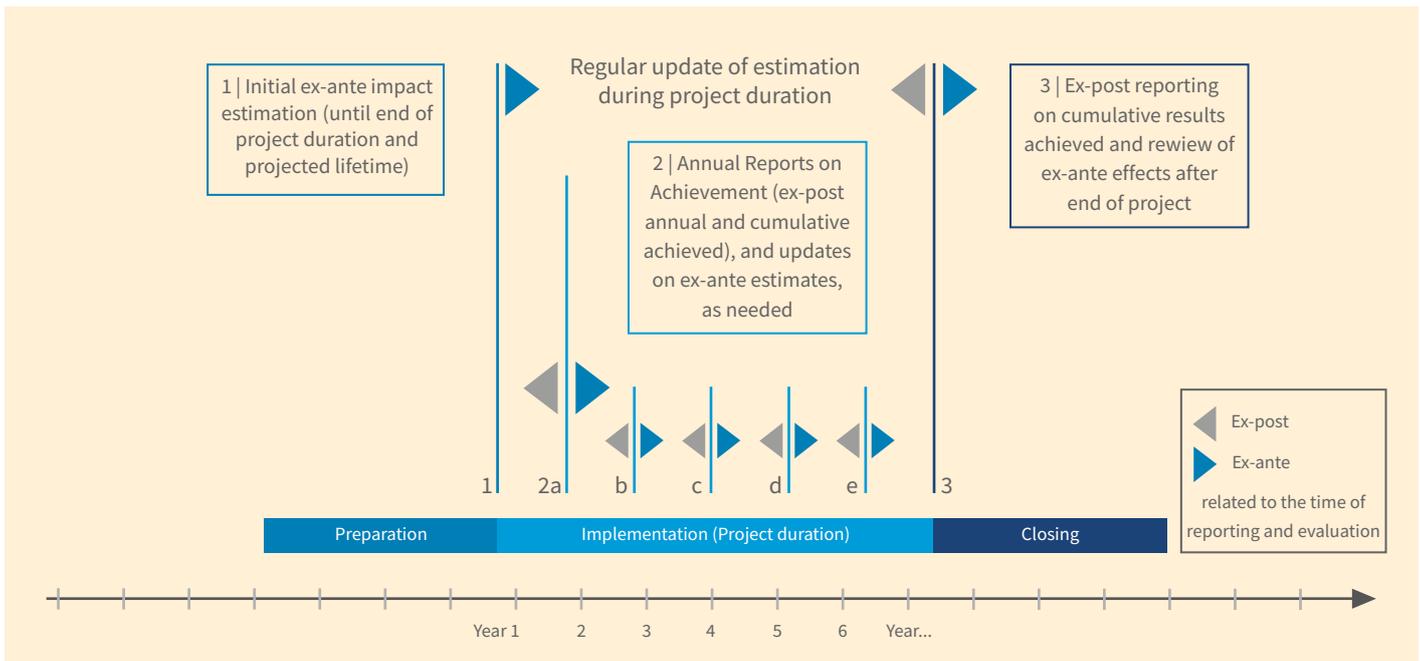


Figure 3: Timing of reporting and evaluation of projects/ Source: the greenwerk., based on IKI (2024), page 49, Figure 5.

**As a common goal under the Paris Agreement, enhanced transparency particularly benefits developing countries by facilitating more effective climate projects.** First, by promoting better-targeted lessons learnt, enhanced transparency can significantly improve project outcomes and foster north-south and south-south cooperation. Although it enables donors to allocate funds to more effective projects, it is crucial to acknowledge that increased transparency should not lead to competition among recipient countries. Certain shortcomings in reporting standards, on the contrary, emphasise the need for support on capacity building to meet international standards, ensuring that all nations can benefit from enhanced transparency and contribute to global climate goals. Second, enhanced harmonisation and transparency have pronounced effects across different thematic fields in climate finance. For mitigation projects, these improvements bolster the impact and effectiveness of actions that not only reduce GHG emissions and achieve national targets (e.g. Nationally Determined Contributions) but also

yield significant co-benefits such as health improvements, social benefits, economic development, and gender equality. In the realm of adaptation projects, better, harmonised, and transparent methodologies for reporting impacts result in higher adaptation and resilience effects, thereby attracting more financial flows into adaptation efforts. This aligns with the NCQG negotiations, which advocate for increased finance directed towards impactful initiatives rather than transaction costs, and for more financial resources to be managed by national institutions instead of foreign entities. Although well-designed cross-cutting projects are a useful and comprehensive approach to addressing interlinked climate challenges, cross-cutting projects may also risk overshadowing dedicated adaptation finance without delivering adequate adaptation impacts (see Box below). Enhanced transparency is essential in highlighting such inadequate projects, ensuring that financial resources are balanced and effectively contribute to both mitigation and adaptation goals.

### **Textbox: The risk of cross-cutting projects to crowd out adaptation finance**

Since an increase in financing began flowing into cross-cutting projects, the risk that cross-cutting projects could crowd out adaptation-focused investments has been debated among practitioners.<sup>37</sup> Although no hard evidence exists, a 2016 E Co. report provides insights into comprehensive interviews with GCF stakeholders. It suggests that some projects have been relabelled as cross-cutting just to give them higher chances of approval, given that cross-cutting projects are becoming more prominent in the GCF pipeline. Around 20% of respondents said that the project type was altered to boost its approval odds.<sup>38</sup> This raises worries about how well cross-cutting projects can reflect the GCF's balance between adaptation and mitigation.

## **4. Conclusions and recommendations**

### **This policy brief provides diverse insights into the gaps and challenges within impact measurement in climate finance.**

Several shortcomings that are outlined are the lack of transparency of climate projects' reporting on mitigation and adaptation impacts, the lack of common grounds to measure comparable adaptation impacts, the inconsistencies concerning pro-rata estimation, the differences in approaches concerning indirect impacts, the inadequate tracking of absolute emissions of non-mitigation projects, and the predominant focus on ex-ante evaluations.

### **In the brief, measures are suggested to strengthen the harmonisation of impact accounting methodologies as well as to enhance the transparency of impact reporting.**

Overall, such interventions can lead to better-informed decision-making and higher efficiency of climate finance flows. Such reforms would benefit developing countries to maximise the potential in both mitigation and adaptation efforts and related sustainable development. Harmonised and transparent reporting on climate finance impacts ensures fair distribution to the benefit of least developed countries and small island developing states.

### **A harmonised methodological approach is essential for comparing the effectiveness of climate finance across different sources and projects under the NCQG.**

Harmonised accounting practices and standardised reporting of mitigation and adaptation outcomes would reduce inconsistencies and

enable better comparison of results, ensuring that finance delivers on its intended impact. In particular, addressing the gap in adaptation reporting methodologies leads not only to enhanced resilience effects but also to potentially more financial flows into adaptation.

### **Harmonised methodologies and simplified monitoring, reporting, and verification processes reduce administrative burdens and hence reduce transaction costs in the planning and implementation of projects.**

Less financing is needed for services of project preparation and reporting by external partners, hence more financial resources are available for impactful project activities. Also, national institutions can better build their capacities for covering project preparation and reporting tasks in-country for multiple donor agencies, which strengthens national and regional institutions.

### **Ensuring transparency in climate finance is vital for accurately measuring the impact of adaptation initiatives and addressing the disproportionate focus on mitigation.**

Transparent reporting on adaptation impacts builds more trust among donors and makes experiences and lessons learnt more visible, leading to increased adaptation-focused investments and strengthened designs of future projects. Furthermore, transparent reporting helps distinguish climate finance from regular development aid, ensuring that additional resources flow to the most vulnerable populations. Hence, strengthened reporting on adaptation and cross-cutting projects could lead to enhanced and more impactful investments in climate adaptation.

<sup>37</sup> Oxfam (2023); Weikmans et al. (2017); Michaelowa & Michaelowa (2011).

<sup>38</sup> E Co. (2016).

**The NCQG, which aims to drive global climate action and transparent measurement of investment impacts, is a good platform for addressing the issues of climate finance tracking and reporting.** The NCQG decision could include a recognition of the importance of enhancing the effectiveness and impact of the climate finance provided and mobilised, and a commitment by Parties to work towards enhancing effectiveness and impact in all channels, including bilateral, multilateral, and others. A clear framework for measuring project impact enables stakeholders to track progress, promote efficient use of resources, and make necessary adjustments, fostering trust and collaboration. This approach maximises the impact of climate investments, driving collective progress towards global climate goals.

**Concretely, the NCQG could also tackle the effectiveness and impact question by calling on different channels of climate finance to enhance complementarity and coherence** in terms of methodological approaches to accounting and measuring climate impacts, to the extent possible. It could also call on these same channels to work towards harmonising requirements for the assessment of impacts.

**Additionally, the NCQG could include reporting on impacts and effectiveness as part of its transparency arrangements.** If the Enhanced Transparency Framework (ETF) is agreed as the basis for reporting under the NCQG, this could lead to a revision of the ETF in the future. This revision could serve to improve reporting of impact and effectiveness. The

NCQG decision could already indicate this need to revise and enhance impact and effectiveness reporting under the ETF. This streamlined approach would support the global stock-take process by accurately tracking how finance contributes to emissions reductions and adaptation benefits. It would help close the gap between current actions and the ambition needed to achieve climate goals, providing data to adjust efforts. Independent verification of outcomes, at least from those under the UNFCCC umbrella (GCF, GEF, AF), such as emissions reductions and adaptation beneficiaries, would ensure accuracy and credibility, further supporting global climate progress.

**Furthermore, if the Standing Committee on Finance is mandated to produce periodic reports on progress made towards the NCQG, this mandate could include reporting of impacts and effectiveness from different sources,** including information made available by the different channels of climate finance, as well as other scientific and technical sources.

**Effectiveness, in the broader sense, which includes adequacy and predictability, could also be addressed in the transparency arrangements of the NCQG,** by including enhanced reporting in the biennial communications in accordance with Article 9, paragraph 5, which deals with ex-ante information on resources to be provided to developing countries.

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Annex 1:

Summary of mitigation impact measuring approaches						
Institution	Quantitative Indicators	Accounting Standard Used	Assessment Period	Direct/ Indirect	Co-finance Included	Ex-ante/Ex-post Reporting
<b>Green Climate Fund</b>	<p><u>IRMF indicators</u> CORE 1: GHG EMISSIONS REDUCED, AVOIDED OR REMOVED/ SEQUESTERED</p> <p>Sub-indicators:</p> <ul style="list-style-type: none"> <li>• Annual energy savings (MWh)</li> <li>• Installed energy storage capacity (MWh)</li> <li>• Installed renewable energy capacity (MW)</li> <li>• Renewable energy generated (MWh)</li> <li>• Improved low-emission vehicle fuel economy (net change in fuel consumption per kilometre travelled) (Unit: volume of fuel per kilometre travelled by fuel type and equivalent energy unit/joule)</li> </ul> <p><u>Investment criteria/efficiency indicator</u></p> <ul style="list-style-type: none"> <li>• Cost (GCF funding) per tCO<sub>2</sub>eq mitigated</li> </ul>	The IRMF of the GCF requires that any GCF investment aimed at emission reductions must clearly outline the methodologies used for establishing the emissions baseline, determining additionality, and monitoring ongoing reductions <sup>39</sup>	Project and underlying technology lifetime	Direct impacts only	Including co-financing, i.e. no pro-rata attribution	<p>Annual performance report, including quantitative data against all the selected IRMF mitigation and adaptation indicators (core and supplementary), as well as project/ programme-specific indicators</p> <p>No aggregated and project-specific ex-post data available</p>
<b>Global Environmental Facility (GEF)</b>	<p>GEF Core Indicator Greenhouse Gas Emissions Mitigated refers to the total reduction of GHG emissions and enhancement of sinks and reservoirs in tCO<sub>2</sub>eq</p> <p>Additional indicators relate to:</p> <ul style="list-style-type: none"> <li>• Energy saved in megajoules (MJ)</li> <li>• Increase in installed renewable energy capacity per technology in megawatts (MW)</li> </ul>	Not prescribed. The GEF has some of its own GHG methodologies for renewable energy and energy-efficiency projects as well as transportation projects <sup>40</sup>	Implementation period or after it, but supported by financial facilities or regulatory interventions by the GEF project	Direct and indirect impact for the core indicator: (i) lifetime direct GHG emissions mitigated and (ii) lifetime indirect GHG emissions mitigated (e.g. result of replication)	Including co-financing, i.e. no pro-rata attribution	<p>Ex-ante, with potential ex-post evaluation during project duration</p> <p>No aggregated and project-specific ex-post data available</p>

39 GCF, 2022. Although custom methodologies are permitted, for most projects it is recommend to use established, peer-reviewed methods such as Clean Development Mechanism (CDM) methodologies, Article 6.4 methodologies under the Paris Agreement, the Joint Crediting Mechanism (JCM), the Gold Standard, IFI TWG methodologies, Verified Carbon Standard (VCS), and tools like the Food and Agriculture Organization’s Ex-Ante Carbon Balance Tool (EX-ACT) and the Forest Carbon Partnership Facility (FCPF) Carbon Fund Methodological Framework.

40 See: [https://www.thegef.org/sites/default/files/council-meeting-documents/EN\\_GEF.C.48.Inf\\_09\\_Guideline\\_on\\_GHG\\_Accounting\\_and\\_Reporting\\_for\\_GEF\\_Projects.pdf](https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.48.Inf_09_Guideline_on_GHG_Accounting_and_Reporting_for_GEF_Projects.pdf) and <https://stapgef.org/sites/default/files/2020-02/GEF-EE-Methodology-v1.0.pdf?null=>

<p><b>Climate Investment Funds (CIF)<sup>41</sup></b></p>	<p><u>Core indicators:</u>  <b>B1.</b> Tonnes of GHG emissions reduced or avoided  <b>B2.</b> Volume of direct finance leveraged through CTF funding – disaggregated by public and private finance  <b>B3.</b> Installed capacity (MW) as a result of CTF interventions  <b>B4.</b> Number of additional passengers (disaggregated by men and women if feasible) using low-carbon public transport as a result of CIF interventions  <b>B5.</b> Annual energy savings as a result of CTF interventions (GWh)</p>	<p>Not prescribed, but referring to methodologies developed by MDBs</p>	<p>Lifetime of the investments</p>	<p>Direct and Indirect (for example, as a result of replication)</p>	<p>Including co-financing, i.e. no pro-rata attribution</p>	<p>Ex-post reporting during project duration  No aggregated and project-specific ex-post data available</p>
<p><b>International Financial Institution (IFI) Framework for a Harmonised Approach to Greenhouse Gas Accounting<sup>42</sup></b></p>	<p>Absolute and relative emissions in tCO<sub>2</sub>e for each project</p>	<p>Own methodology based on GHG Protocol. Sector-specific methodologies on renewable energy, energy efficiency, and transport</p>	<p>Finance period and technology lifetime</p>	<p>Only direct impact</p>	<p>Pro-rata attribution</p>	<p>Ex-ante, with ex-post evaluation during project duration  No aggregated and project-specific ex-post data available</p>
<p><b>Mitigation Action Facility</b></p>	<p>Reduced GHG emissions (direct and indirect emissions) in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)</p>	<p>Not prescribed, but referring to existing methodologies such as IPCC, CDM, GHGP, etc.</p>	<p>Project lifetime and until ten years after its completion, plus technology lifetime</p>	<p>Direct (financial component) and indirect (financial mechanism after project duration/ technical assistance) impact</p>	<p>Including co-financing, i.e. no pro-rata attribution</p>	<p>Ex-ante, with ex-post evaluation during project duration  No aggregated and project-specific ex-post data available</p>

41 CIF, 2024. The CIF implements its programme-specific monitoring and reporting (M&R) frameworks through a comprehensive set of M&R toolkits. The toolkits are CIF-programme-specific applications of the general CTF M&R Toolkit (CIF, 2014), which defines five core indications, including tonnes of GHG emissions reduced or avoided, and are hence not general methodologies easy to adapt to another project’s context.

42 IFI, 2021.

<p><b>International Climate Initiative (IKI)</b></p>	<p>GHG emissions reduced or carbon stocks enhanced directly or indirectly by project measures in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>eq)</p>	<p>Not prescribed, but referring to existing methodologies such as IPCC, CDM, GHGP, etc.</p>	<p>Project lifetime and technology lifetime (reported until 2030, 2040, and 2050)</p>	<p>The indicator captures three categories:</p> <ul style="list-style-type: none"> <li>• Direct mitigation through</li> <li>• financing of mitigation measures</li> <li>• Indirect mitigation through</li> <li>• technical support of mitigation measures</li> <li>• Enhanced policy frameworks or long-term mitigation impact through enhance policy frameworks</li> </ul>	<p>Pro-rata attribution for direct impacts</p>	<p>Ex-ante, with ex-post evaluation during project duration</p> <p>No aggregated and project-specific ex-post data available</p>
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Table 1: Overview of different approaches for estimating and reporting the climate mitigation impact / Source: the greenwerk., based on GCF (2022), GEF (2022), CIF (2024), IFI (2021), Mitigation Action Facility (2024) and (IKI (2024); core indicators are marked in bold. CDM = Clean Development Mechanism; CTF = Clean Technology Fund; GHGP = GHG Protocol; IPCC= Intergovernmental Panel on Climate Change; IRMF = Integrated Results Management Framework.

Annex 2:

Summary of adaptation impact measuring approaches		
Area	Adaptation Fund	Green Climate Fund
<p><b>Beneficiaries and institutions</b></p>	<p><b>Core indicator: No. of beneficiaries</b></p> <ul style="list-style-type: none"> <li>Indicator 1: Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis</li> <li>Indicator 1.1: No. of projects/programmes that conduct and update risk and vulnerability assessments</li> <li><b>Core indicator 1.2: No. of early warning systems</b></li> </ul> <p>Indicator 2: Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased</p> <ul style="list-style-type: none"> <li>2.1.1: No. of staff trained to respond to, and mitigate impacts of, climate-related events</li> <li>2.1.2: No. of targeted institutions with increased capacity to minimise exposure to climate variability risks</li> <li>2.2.1: No. of people benefiting from the direct access and enhanced direct-access modality</li> </ul> <p>Indicator 3.1: Increase in application of appropriate adaptation responses</p> <ul style="list-style-type: none"> <li>3.1.1: Percentage in targeted population awareness of predicted adverse impacts of climate change, and of appropriate responses</li> <li>3.2.1: No. of technical committees/associations formed to ensure transfer of knowledge</li> <li>3.2.2: No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders</li> </ul> <p>Indicator 6.1: Increase in households and communities having more secure access to livelihood assets</p> <ul style="list-style-type: none"> <li>6.1.1: No. and type of adaptation assets created or strengthened in support of individual or community livelihood strategies</li> <li><b>Core indicator 6.1.2: Increased income, or avoided decrease in income</b></li> </ul> <p>Indicator 6.2: Increase in targeted population’s sustained climate-resilient alternative livelihoods</p>	<p><b>Core indicator 2: Direct and indirect beneficiaries reached</b></p> <ul style="list-style-type: none"> <li>2.1 Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options (number of individuals)</li> <li>2.2 Beneficiaries (female/male) with improved food security (number of individuals)</li> <li>2.3 Beneficiaries (female/male) with more climate-resilient water security (number of individuals)</li> <li>2.4 Beneficiaries (female/male) covered by new or improved early warning systems (number of individuals)</li> <li>2.5 Beneficiaries (female/male) adopting innovations that strengthen climate change resilience (number of individuals)</li> <li>2.6 Beneficiaries (female/male) living in buildings that have increased resilience against climate hazards (number of individuals)</li> <li>2.7 Change in expected losses of lives because of the impact of extreme climate-related disasters in the geographic area of the GCF intervention (number of individuals)</li> </ul>
<p><b>Resilience of physical assets</b></p>	<p>Indicator 4.1: Increased responsiveness of development sector services to evolving needs from changing and variable climate</p> <p><b>Core indicator 4.2: Assets produced, developed, improved, or strengthened</b></p> <ul style="list-style-type: none"> <li>4.1.1: No. and type of development sector services to respond to new conditions resulting from climate variability and change</li> </ul>	<p><b>Core indicator 3: Value of physical assets made more resilient to the effects of climate change and/or more able to reduce GHG emissions</b></p> <ul style="list-style-type: none"> <li>3.1 Change in expected losses of economic assets because of the impact of extreme climate-related disasters in the geographic area of the GCF intervention (value in USD)</li> </ul>

<p><b>Enhanced climate resilience of natural resource</b></p>	<p>Indicator 5: Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress  <b>Core indicator 5.1: Natural assets protected or rehabilitated</b></p>	<p><b>Core indicator 4: Hectares of natural resource areas brought under improved low-emission and/or climate-resilient management practices</b></p> <ul style="list-style-type: none"> <li>• 4.1 Hectares of terrestrial forest, terrestrial non-forest, freshwater, and coastal-marine areas brought under restoration and/or improved ecosystems</li> <li>• 4.2 Number of livestock brought under sustainable management practices</li> <li>• 4.3 Tonnes of fish stock brought under sustainable management practices</li> </ul>
<p><b>Long-term strategies for adaptations</b></p>	<p>Indicator 7: Climate change priorities are integrated into national development strategy</p> <ul style="list-style-type: none"> <li>• 7.1: No. of policies introduced or adjusted to address climate change risks</li> <li>• 7.2: No. of targeted development strategies with incorporated climate change priorities enforced</li> </ul>	
<p><b>Climate-resilient practices</b></p>	<p>Indicator 8: Innovative adaptation practices are rolled out, scaled up, encouraged and/or accelerated at regional, national and/or subnational level</p> <ul style="list-style-type: none"> <li>• 8.1: No. of innovative adaptation practices, tools, and technologies accelerated, scaled up, and/or replicated</li> <li>• 8.2: No. of key findings on effective, efficient adaptation practices, products, and technologies generated</li> </ul>	

Table 2: Overview of core indicators for adaptation under the AF and the GCF / Source: the greenwerk., based on GCF (2022) and AF (2019); core indicators are marked in bold.

## About



The Climate Finance Advisory Service (CFAS) offers negotiators, policy makers and advisors in the poorest and most climate vulnerable countries bespoke information and guidance to help them effectively participate in complex global climate finance negotiations.

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