



CARBON FUND
METHODOLOGICAL FRAMEWORK

**FOREST
CARBON
PARTNERSHIP**
FACILITY

FINAL - DECEMBER 20, 2013

FCPF Carbon Fund Methodological Framework

Final, December 20, 2013

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1. GENERAL APPROACH

The Forest Carbon Partnership Facility (FCPF) is designed “to assist developing countries in their efforts on reducing emissions from deforestation and/or forest degradation”, conservation of forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks (“REDD+”) “by building their capacity and developing a methodological and policy framework that provides incentives for the implementation of REDD+ programs” (Charter of the FCPF, page 1).

Specifically the FCPF has the following objectives (per the Charter, page 11):

- “To assist Eligible REDD Countries in their efforts to achieve Emission Reductions from deforestation and/or forest degradation by providing them with financial and technical assistance in building their capacity to benefit from possible future systems of positive incentives for REDD;
- To pilot a performance-based payment system for Emission Reductions generated from REDD activities, with a view to ensuring equitable benefit sharing and promoting future large scale positive incentives for REDD;
- Within the approach to REDD, to test ways to sustain or enhance livelihoods of local communities and to conserve biodiversity; and
- To disseminate broadly the knowledge gained in the development of the Facility and implementation of Readiness Preparation Proposals and Emission Reductions Programs.”

In order to achieve these objectives, the Facility comprises the following two funds:

- a) A Readiness Fund; and
- b) A Carbon Fund.

The Carbon Fund is designed to pilot the implementation of REDD+ programs, via use of positive incentives. Carbon Fund Participants seek both to achieve net emission reductions across the portfolio, and to pilot REDD+ across a diverse set of countries, including countries that have historically experienced low deforestation rates. Carbon Fund Participants will take this into account when selecting Emission Reductions Programs (ER Programs) for signing an Emission Reduction Payment Agreement (ERPA).

The FCPF envisions the need for a Methodological Framework (MF) that would provide guidance to the development of these pilots, as noted in the Charter. The Methodological Framework complements other documents and processes that together contribute to the development and selection of REDD+ Programs. This relationship is illustrated in Annex 1.

As a first step in the development of the Methodological Framework, the Participants Committee (PC) of the FCPF adopted a set of guiding principles in the *Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)*¹. The PC requested the FCPF’s Facility Management Team and the Carbon Fund to further develop the Methodological Framework by building on the elements and rationales contained in these Guiding Principles while taking into account the needs of REDD Country Participants as well as Carbon Fund Participants.

¹ Resolution PC/12/2012/3

<http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/July2012/Resolution%203%20Meth%20Fmwk%20and%20Pricing.pdf> and

<http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Jul2012/FMT%20Note%202012-8%20Working%20Group%20Recommendations%2006-11-2012%20English.pdf>

In its principles (referred to as “elements”, with accompanying rationales), the PC indicated that “the Methodological Framework for the Carbon Fund (CF) is not expected to consist of detailed calculation methods or protocols. Rather the Framework should provide the overarching guidance and act as a standard that is designed to achieve a consistent approach to carbon accounting and programmatic characteristics”. As a result, Carbon Fund Participants decided to use a set of criteria and indicators (C&I) to elaborate requirements for ER Programs to be piloted in the Carbon Fund. This decision was made in consideration of trade-offs among a number of factors: simplicity of methods, flexibility to pilot approaches and encourage innovation, consistency of Emission Reductions (ERs), and predictability of assessment of ER Programs.

ER Programs are expected to demonstrate conformity with the Carbon Fund’s Methodological Framework and the criteria and indicators listed in this document. This Framework may be refined from time to time, after the first few ER-PINs or ER Programs proceed and lessons are learned, or as new guidance on REDD+ is provided by the UNFCCC. However, while the Carbon Fund encourages ER Programs to consider meeting such refinements on a voluntary basis, it will not require ER Programs, once an ERPA is signed, to meet new or revised criteria and indicators that may be subsequently approved by the CF.

Additional operational information for ER programs, including information on World Bank due diligence and operational polices, and non-binding good practice guidance, may be produced in separate documents to complement the MF and shared to assist ER Programs in meeting the Framework’s requirements. Good practice guidance may take the form of links to existing guidance, methods, and examples of practices by REDD+ countries, with some guidelines or decision support tools added where needed. The capacity of the ER Program to implement and monitor the ER Program will be assessed by the World Bank as part of its due diligence process.

Structure of this document:

Each section begins with the relevant elements from the FCPF Participants Committee Guiding Principles document of June, 2012, which offered PC guidance to the Carbon Fund’s work developing the MF. The section then provides a context and rationale for the criteria and indicators that are included. Terms specific to the MF are defined in the section 7 Glossary and are capitalized throughout the MF text (but not those in the Annex 2 Glossary of the other useful terms).

Some linkages across sections are indicated, since some topics overlap and ER Programs are likely to build on country REDD+ readiness activities and to be embedded in dynamic sustainable development contexts. To ensure that the results achieved by ER Programs will be long-lasting, C&Is that contribute to sustainable design and implementation are spread throughout the MF. The MF emphasizes the importance of sound ER Program design and implementation by asking for clarity on how the ER Program addresses the drivers of deforestation and forest degradation.

The ER Program also is asked to identify effective incentives it would provide to facilitate changes in land-use behavior to reduce deforestation and degradation (in Section 5). The MF reinforces the linkages between the design of the ER Program and how the ER Program deals with Displacement and Reversal risks (Section 3). To ensure transparent and inclusive processes, as well as environmental and social integrity, environmental and social safeguards are addressed in Section 4, while Benefit Sharing, Non-Carbon Benefits as well as issues such as resource rights and land tenure are included in Section 5 of this document.

The content of the MF is not intended to prejudice the outcome of the UNFCCC negotiation process with regard to REDD+, but instead may be modified, if necessary, in accordance with any relevant guidance existing or emerging under the UNFCCC negotiation process. Furthermore, the content of the MF is specific to the CF and neither represents nor prejudices any CF Participant's or REDD+ Country Participant's official position on issues related to REDD+ under the UNFCCC negotiation process or any other REDD+ initiative.

Timing Considerations in ER Programs and in this Document

- In general, ER Programs are expected to meet the requirements stated by the criteria and indicators at the time the final ER Program Document is submitted to the CF, and continuing through implementation.
- Some requirements, however, should be met at the time of ERPA signing or at other points during the implementation of the ER Program (e.g., during periodic verifications), and their timing is noted.
- The templates for the ER-PIN, ER Program Document, and ER Program Monitoring Report (as amended) will specify in detail what information is to be included in each document.

2. LEVEL OF AMBITION

2.1 Scale and Ambition

“Programmatic Element 2: Scale and Ambition

The ER Program is ambitious, in that it demonstrates at a large scale the potential of the full implementation of the variety of interventions of the national REDD+ strategy, covering a significant portion of the territory.”

--FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

To date most REDD+ transactions have relied on a project-based approach. The ambition of the Carbon Fund is to test large-scale approaches that require a mix of policies and investments, integration with national development strategies, use of innovative financial structures, and involvement of multi-stakeholder approaches. Large-scale accounting is more likely to capture the wide range of REDD+ drivers, provide ER Programs with incentives to establish comprehensive REDD+ strategies, and generally enhance the environmental integrity of the system.

Criterion 1: The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.

Indicator 1.1: The ER Program Measures aim to address a significant portion of forest-related emissions and removals.

Indicator 1.2: The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce emissions or enhance removals, is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner.

Criterion 2: The Accounting Area matches a government-designated area that is of significant scale.

Indicator 2.1: The Accounting Area is of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas.

3. CARBON ACCOUNTING

3.1 Scope and methods

“Overarching Accounting and Programmatic Element: Consistency with UNFCCC principles

The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+, particularly guidance and principles in place at the time of ERPA signature, as relevant and feasible.

Relevant principles include those on transparency, consistency, completeness, and accuracy. Relevant guidance includes decisions on, for example, safeguards and reference levels.”

--FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

ER programs should be allowed flexibility in the choice of sources and sinks they will account for. However, ER Programs must account for emissions from deforestation; and emissions from forest degradation must be accounted for where emissions are estimated to be significant.

Excluding certain pools (for example, soil carbon) is usually conservative for activities related to avoided deforestation and degradation. However in some cases, such as reforestation activities involving heavy ground disturbance from land clearing and planting, or forest management on drained peat land, soil carbon emissions may be significant and should be accounted for to maintain environmental integrity.

Criterion 3: The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.

Indicator 3.1: The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program.

Indicator 3.2: The ER Program accounts for emissions from deforestation.

Indicator 3.3: Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ERPA. These emissions are estimated using the best available data (including proxy activities or data).

Criterion 4: The ER Program should account for, measure, and report, and include in the ER Program Reference Level, significant Carbon Pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.

Indicator 4.1: The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR).

Indicator 4.2: Carbon Pools and greenhouse gases may be excluded if:

- i. Emissions associated with excluded Carbon Pools and greenhouse gases are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period; or
- ii. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions.

Criterion 5: The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks².

Indicator 5.1: The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).

Criterion 6: Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions), are documented and made publicly available online. In cases where the country's or ER Program's policies exempt sources of information from being publicly disclosed or shared, the information should be made available to independent reviewers and a rationale is provided for not making these data publicly available. In these cases, reasonable efforts should be made to make summary data publicly available to enable reconstruction.

Indicator 6.1: The following methodological steps are made publicly available:

- Forest definition
- Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable
- Choice of activity data, and pre-processing and processing methods
- Choice of emission factors and description of their development
- Estimation of emissions and removals, including accounting approach
- Disaggregation of emissions by sources and removal by sinks
- Estimation of accuracy, precision, and/or confidence level, as applicable
- Discussion of key uncertainties
- Rationale for adjusting emissions, if applicable
- Methods and assumptions associated with adjusting emissions, if applicable.

² e.g., UNFCCC 4/CP.15

Indicator 6.2: For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available:

- Accounting Area
- Activity data (e.g., forest-cover change or transitions between forest categories)
- Emission factors
- Average annual emissions over the Reference Period
- Adjusted emissions
- Any spatial data used to adjust emissions, if applicable.

3.2 Uncertainties

“Accounting Element 1: Stepwise approach to reduce uncertainties

ER Program data and methods are consistent with IPCC Tier 2, and ER Programs should, by using conservative assumptions and quantitative assessment of uncertainties, be incentivized to reduce uncertainties associated with all aspects of accounting, inter alia, reference levels, monitoring, and reporting (i.e., such that reductions in uncertainty are rewarded by a corresponding upward Adjustment in ER volume).”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

Uncertainties arise in Reference Level setting and Measurement, Monitoring and reporting. Uncertainty (the lack of knowledge of the true value) is due to both random and systematic errors. Uncertainties can be addressed in a number of ways. Systematic errors (bias) should be avoided by good Measurement practices. Random errors tend to cancel each other out and can be managed by sampling. Using standard approaches to assessing uncertainty allows for comparability between ER programs.

ER Programs are required to follow a 3-step process to ensure consistency:

1. Identify and assess sources of uncertainty
2. Minimize uncertainty where feasible and cost effective
3. Quantify remaining uncertainty.

Criterion 7: Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting.

Indicator 7.1: All assumptions and sources of uncertainty associated with activity data, emission factors and calculation methods that contribute to the uncertainty of the estimates of emissions and removals are identified.

Indicator 7.2: The sources of uncertainty identified in Indicator 7.1 are assessed for their relative contribution to the overall uncertainty of the emissions and removals.

Criterion 8: The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.

Indicator 8.1: Systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes that work within the local circumstances of the ER Program.

Indicator 8.2: Random errors and other uncertainties are minimized to the extent practical based on the assessment of their relative contribution to the overall uncertainty of the emissions and removals.

Criterion 9: Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs³.

Indicator 9.1: Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) should be used to estimate uncertainty⁴.

Indicator 9.2: Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level.

Indicator 9.3: Uncertainty of Emissions Reductions associated with deforestation, forest degradation and enhancements are reported separately if measured through separate (i.e., non-integrated) approaches and when degradation is estimated using proxy data.

³ This uncertainty is subsequently applied in the calculation of Emission Reductions, refer to Criterion 22.

⁴ 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Volume 1, Chapter 3, Section 3.2).

3.3 Reference Levels

“Accounting Element 2: Reference Level

ERs from an ER Program should be conservatively measured and reported relative to a transparently presented and clearly documented Forest Reference Emission Level or Forest Reference Level for the ER Program Measures Area, following the guidance of the Carbon Fund Methodological Framework and informed by the emerging national Forest Reference Emission Level or Forest Reference Level.

Rationale: (a) Per UNFCCC REDD+ texts and discussions internationally and the FCPF Charter, the performance of REDD+ activities (and ER Programs for the CF) would be measured against a pre-established forest reference emission level and/or forest reference level. (b) The CF should have flexibility to provide guidance on how ER Programs should set their own reference level, to meet its needs and to ensure environmental integrity. Detailed, operational methods have not yet been proposed by the UNFCCC, and may be proposed for the CF in its evolving Methodological Framework.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

Reference Levels for ER Programs may be developed prior to a national or subnational Forest Reference Emission Level or Forest Reference Level that the country may submit to UNFCCC, or may be at a smaller scale or differ in other respects. As a result, ER Programs in the Carbon Fund may pilot approaches to establish a Reference Level that inform or are informed by the country’s work and methods developing its Forest Reference Emission Level or Forest Reference Level to meet UNFCCC guidance.

When developing Reference Levels, ER Programs should ensure that consistent methods and Accounting Area are to be maintained between estimation of emissions in the Reference Period and during the Term of the ERPA.

The MF approach allows a limited set of ER Programs to adjust Reference Levels above average historical rates, states what adjustments may be made, and defines quantitative limits on adjustments. Historical reference levels allow most ER Programs to contribute to mitigation and access finance through avoided deforestation and degradation or carbon stock enhancement. However, adjusted Reference Levels would allow ER Programs within countries with a long-term history of minimal deforestation to contribute to mitigation and access finance as well.

Additionality primarily is addressed through conservative approaches to setting Reference Levels (e.g., including existing and clearly funded programs or activities within the Reference Level), rather than through additionality tests often utilized by project-level initiatives, which have proven difficult to operationalize.

Criterion 10: The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC.

Indicator 10.1: The Reference Level is expressed in tonnes of carbon dioxide equivalent per year.

Indicator 10.2: The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC.

Indicator 10.3: The ER Program explains what steps are intended in order for the Reference Level to achieve consistency with the country's existing or emerging greenhouse gas inventory.

Criterion 11: A Reference Period is defined.

Indicator 11.1: The end-date for the Reference Period is the most recent date prior to 2013 for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy.

Indicator 11.2: The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date.

Criterion 12: The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17.

Indicator 12.1: The definition of forest used in the construction of the Reference Level is specified. If there is a difference between the definition of forest used in the national greenhouse gas inventory or in reporting to other international organizations (including an Forest Reference Emission Level or Forest Reference Level to the UNFCCC) and the definition used in the construction of the Reference Level, then the ER Program explains how and why the forest definition used in the Reference Level was chosen.⁵

⁵ UNFCCC SBSTA 12/CP.17 Annex Para. 4

Criterion 13: The Reference Level does not exceed the average annual historical emissions over the Reference Period. For a limited set of ER Programs, the Reference Level may be adjusted upward by a limited amount above average annual historical emissions⁶. For any ER Program, the Reference Level may be adjusted downward.

Indicator 13.1: The Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2. If the available data from the National Forest Monitoring System used in the construction of the Reference Level shows a clear downward trend, this should be taken into account in the construction of the Reference Level.

Indicator 13.2: The Reference Level may be adjusted upward above average annual historical emissions if the ER Program can demonstrate to the satisfaction of the Carbon Fund that the following eligibility requirements are met:

- i. Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover;
- ii. National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA.

Indicator 13.3: For countries meeting the eligibility requirements in Indicator 13.2, a Reference Level could be adjusted above the average historical emission rate over the Reference Period. Such an adjustment is credibly justified on the basis of expected emissions that would result from documented changes in ER Program circumstances, evident before the end-date of the Reference Period, but the effects of which were not fully reflected in the average annual historical emissions during the Reference Period. Proposed adjustments may be rejected for reasons including, but not limited to:

- i. The basis for adjustments is not documented; or
- ii. Adjustments are not quantifiable.

Indicator 13.4: An adjustment of the Reference Level above the average annual historical emissions during the Reference Period may not exceed 0.1%/year of Carbon Stocks.

⁶ The Carbon Fund seeks both to achieve net emission reductions across its portfolio, and to pilot REDD+ across a diverse set of countries, including those countries with high forest cover and low deforestation. Carbon Fund Participants will take this into account when selecting ER Programs.

3.4 Measurement, Monitoring and Reporting on Emission Reductions

“Accounting Element 3: Consistency with monitoring system

ER Program monitors and reports ERs and other non-carbon variables consistent with the emerging national forest monitoring system, using methods appropriate for ER Program circumstances, including community monitoring that are transparently presented and clearly documented.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

Monitoring (repeated Measurements of emissions and removals) is needed to estimate ERs generated by the ER Program. The Carbon Fund should follow emerging UNFCCC guidance on REDD+ as much as possible. Monitoring systems need to be designed to allow for operational Measurement, Monitoring and reporting of activity data and emission factors. AD and EF require different frequency and quality of measurements and are considered separately.

Criterion 14: Robust Forest Monitoring Systems provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying emissions by sources and removals by sinks, as determined by following Criterion 3 within the proposed Accounting Area.

Indicator 14.1: The ER Program monitors emissions by sources and removals by sinks included in the ER Program’s scope (Indicator 3.1) using the same methods or demonstrably equivalent methods to those used to set the Reference Level.

Indicator 14.2: Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available.

Indicator 14.3: Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. IPCC Tier 2 or higher methods are used to establish emission factors, and the uncertainty for each emission factor is documented. IPCC Tier 1 methods may be considered in exceptional cases.

Criterion 15: ER Programs apply technical specifications of the National Forest Monitoring System where possible.

Indicator 15.1: ER Programs articulate how the Forest Monitoring System fits into the existing or emerging National Forest Monitoring System, and provides a rationale for alternative technical design where applicable.

Criterion 16: Community participation in Monitoring and reporting is encouraged and used where appropriate.

Indicator 16.1: The ER Program demonstrates that it has explored opportunities for community participation in Monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate.

3.5 Accounting for Displacement (Leakage)

“Accounting Element 5: Address displacement

Potential sources of domestic and international displacement of emissions (Displacement) are identified by assessment of all drivers of land-use change relevant for the ER Program; and measures to minimize and/or mitigate the risk of displacement of domestic emissions are incorporated into ER Program design and the estimation and monitoring of ERs.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

Emphasis should be placed on good Program design that reduces the risk of market- or subsistence-driven displacement, e.g., by maintaining the same level of production of commodities under the ER Program that occurred prior to the Program, and by introducing and supporting alternative sustainable livelihoods in the ER Program.

ER Programs should seek to minimize and mitigate Displacement outside the Accounting Area (domestic and international) to the extent possible via design of the ER Program. However, due to accounting and attribution challenges and following UNFCCC guidance on REDD+, potential international Displacement should not have to be accounted for or deducted from the ERs credited to ER Programs. (See also: Section 5, Sustainable Program Design.)

Criterion 17: The ER Program is designed and implemented to prevent and minimize potential Displacement.

Indicator 17.1: Deforestation and degradation drivers that may be impacted by the proposed ER Program Measures are identified, and their associated risk for Displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low.

Indicator 17.2: The ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential Displacement, prioritizing key sources of Displacement risk.

Indicator 17.3: By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement.

Indicator 17.4: ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement.

3.6 Accounting for Reversals (Non-permanence)

“Accounting Element 4: Address reversals

ER Programs should identify potential sources of reversal of ERs (non-permanence); have the capacity to monitor and report any reversal of previously monitored and reported ERs; and have measures in place to address major risks of anthropogenic reversals for the ER Program area, to the extent feasible.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for C&I:

Emphasis should be on sound ER Program design and implementation that reduces the risk of Reversals. To ensure long-term Emissions Reductions, the risk of Displacements and Reversals, as well as appropriate ER Program Measures and possible risk mitigation mechanisms, needs to be addressed as part of the ER Program design, and ER Programs should have in place a robust Reversal management mechanism during implementation.

The current C&I provide the flexibility to adopt different approaches for effectively dealing with Reversals, potentially including buffer reserves (the default mechanism), or use of insurance, host country guarantees, etc., as long as the mechanism can be shown to address the risk of Reversals effectively and address ER sustainability during and after the Term of the ERPA. (See also: Section 5, Sustainable Program Design.)

Criterion 18: The ER Program is designed and implemented to prevent and minimize the risk of Reversals and address the long-term sustainability of ERs.

Indicator 18.1: The ER Program has undertaken an assessment of the anthropogenic and natural risk of Reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential risk of Reversals after the end of the Term of the ERPA.

Indicator 18.2: The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA.

Criterion 19: The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA

Indicator 19.1: During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options:

Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by the ER Program CF Buffer approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals.

Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Program CF Buffer equivalent to the amount of transferred ERs affected by the Reversal event⁷.

Criterion 20: The ER Program, building on its arrangements put in place during the readiness phase and during the Term of the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals after the Term of the ERPA.

Indicator 20.1: At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA.

Indicator 20.2: If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining Buffer ERs in the ER Program CF Buffer will be cancelled.

Criterion 21: The ER Program monitors and reports major emissions that could lead to Reversals of ERs transferred to the Carbon Fund during the Term of the ERPA.

⁷ The modalities for the ER Program CF Buffer will be developed separately including the Reversal risk assessment. The ER Program CF Buffer shall cover Reversal events, provided that the ER Program Entity is in full compliance with its obligations under or in connection with the ERPA. The ERs set aside to cover Reversal events in the ER Program CF Buffer will have a minimum set aside of 10% and a maximum set aside of 40% of the ERs generated, verified and transferred to the CF at each time of ER transfer.

Indicator 21.1: The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals.

Indicator 21.2: The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.

3.7 Calculation of ERs

Criterion 22: Net ERs are calculated by the following steps:

1. Subtract the reported and verified emissions and removals from the Reference Level.
2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the following conservativeness factors for deforestation:

Aggregate Uncertainty of Emissions Reductions	Conservativeness Factor
≤ 15%	0%
> 15% and ≤ 30%	4%
> 30 and ≤ 60%	8%
> 60 and ≤100%	12%
> 100%	15%

For estimated Emissions Reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions.

3. Set aside a number of ERs in the ER Program CF Buffer or other Reversal management mechanism created or used by an ER Program to address Reversals.

Criterion 23: To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund.

4. SAFEGUARDS

4.1 Actions to Meet World Bank Safeguards and Promote and Support Cancun Safeguards

“Programmatic Element 3: Safeguards

The ER Program meets World Bank social and environmental safeguards, promotes and supports the safeguards included in UNFCCC guidance related to REDD+, and provides information on how these safeguards are addressed and respected, including through the application of appropriate grievance mechanisms. “

“Programmatic Element 4: Stakeholder participation

The design and implementation of ER Programs is based on and utilizes transparent stakeholder information sharing and consultation mechanisms that ensure broad community support and the full and effective participation of relevant stakeholders, in particular affected Indigenous Peoples and local communities.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

With the World Bank acting as both the Trustee and the Delivery Partner of the Carbon Fund, all ER Programs will need to meet applicable World Bank policies and procedures. ER Programs also should promote and support the safeguards included in the UNFCCC guidance on REDD+. The World Bank’s view is that the World Bank safeguards policies, procedures and practices are consistent with the Cancun safeguards for REDD+.

Meeting the World Bank safeguards at ER Program implementation involves a) taking account of the safeguard policies triggered during readiness preparation and of relevant social and environmental sustainability issues identified during the Strategic Environmental and Social Assessment (SESA) process, and b) implementing the Safeguards Plans prepared in accordance with the Environmental and Social Management Framework (ESMF) that has resulted from the SESA.⁸

The Carbon Fund should require a Feedback and Grievance Redress Mechanism (FGRM) for the ER Program, but it could vary from country to country or from one ERPA to another, depending on local context. It will build on the existing FGRM in the country established during Readiness, as applicable. Guidance on key items of the FGRM may be included in any eventual MF good practices developed. The ER Program should build on the activities carried out during the readiness phase, based on the Guidelines on Stakeholder Engagement in REDD+ Readiness and the Guidance Note on Establishing and Strengthening Grievance Redress Mechanisms.

The ER Program should be based on a full and effective consultative, transparent and participatory process, ensuring that its design and implementation reflect inputs by relevant affected stakeholders, including broad community support by affected Indigenous Peoples. Special attention needs to be paid to legal and customary rights of Indigenous Peoples and local communities, and the ER Program should take into account applicable laws, including national laws and any legally binding national obligations under relevant international laws.

⁸ SESA is the assessment process that combines analytical work and consultation in an iterative fashion to inform the preparation of the national REDD+ strategy. ESMF is an output of SESA that provides a framework to examine the issues and impacts associated with projects, activities, policies and/or regulations that may occur in the future in connection with the implementation of the national REDD+ strategy, but that are not known at the present time.

Criterion 24: The ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+.

Indicator 24.1: The ER Program demonstrates through its design and implementation how it meets relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+, by paying particular attention to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC⁹.

Indicator 24.2: Safeguards Plans address social and environmental issues and include related risk mitigation measures identified during the national readiness process, e.g., in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks. The Safeguards Plans are prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders.¹⁰

Criterion 25: Information is provided on how the ER Program meets the World Bank social and environmental safeguards and addresses and respects the safeguards included in UNFCCC guidance related to REDD+, during ER Program implementation.

Indicator 25.1: Appropriate monitoring arrangements for safeguards referred to in Criterion 24 are included in the Safeguards Plans.

Indicator 25.2: During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS)¹¹ required by the UNFCCC guidance related to REDD+, as appropriate.

Criterion 26: An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity.

⁹ FMT Note CF-2013-3 describes World Bank Safeguard Policies and the UNFCCC REDD+ Safeguards.

¹⁰ If final Safeguards Plans are not provided at the time of ERPA signature, they become a condition precedent which must be fulfilled in order for the sale and purchase obligations under the ERPA to become effective.

¹¹ The abbreviation "SIS" will be used throughout this Methodological Framework to describe a national system for providing information on how the Cancun safeguards are addressed and respected, as contained in UNFCCC Decision 12/CP.17.

Indicator 26.1: An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following:

- i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program;
- ii) Access to adequate expertise and resources for the operation of the FGRM.

Indicator 26.2: The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among FGRM(s) at the local, ER Program, and national levels.

Indicator 26.3: If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM.

5. SUSTAINABLE PROGRAM DESIGN AND IMPLEMENTATION

5.1 Drivers and Land and Resource Tenure Assessments

“Programmatic Element 1: Endorsement and implementing capacity

The ER Program is endorsed by the national government (or governments, as appropriate) and is implemented by an entity (or entities) that has (have) the capacity to implement the proposed REDD+ interventions, potentially via a stepwise approach.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

Sound program design is at the heart of successful ER Programs that manage to sustainably reduce emissions from deforestation and forest degradation. Related drivers need to be clearly identified and addressed by ER Program Measures. To ensure longer-term Emission Reductions, Displacement and the risks of Reversals need to be considered at the onset of ER Program design, thereby anticipating these possibilities and mitigating these risks through appropriate ER Program Measures.

Land tenure and resource rights are complex in REDD+ country settings, and efforts to address them are being explored by a range of REDD+ initiatives. Information on land tenure and resource rights can help inform sound ER Program design, as it may help identify affected rights-holders in the Accounting Area, can guide the targeted design of ER Program Measures, can contribute to efforts to draft equitable Benefit-Sharing Plans, and can demonstrate the ER Program Entity’s ability to transfer Title to ERs. Beyond what is required to implement an ER Program, the ER Program potentially may contribute to progress towards clarifying land and resource tenure in the Accounting Area.

Criterion 27: The ER Program describes how the ER Program addresses key drivers of deforestation and degradation.

Indicator 27.1: The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement.

Indicator 27.2: The ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, and the entities that would undertake them.

Criterion 28: The ER Program has undertaken and made publicly available an assessment of the land and resource tenure regimes present in the Accounting Area.

Indicator 28.1: The ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level (i.e., SESA) and, if necessary, supplements this assessment by undertaking an additional assessment of any issues related to land and resource

tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program, including:

- i. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities);
- ii. The legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law;
- iii. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if critical to the successful implementation of the ER Program, how such conflicts or disputes have been or are proposed to be addressed; and
- iv. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area.

The ER Program demonstrates that the additional assessment has been conducted in a consultative, transparent and participatory manner, reflecting inputs from relevant stakeholders.

Indicator 28.2: The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant.

Indicator 28.3: The ER Program provides a description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund.

5.2 Benefit Sharing

“Programmatic Element 5: Benefit sharing

The ER Program uses clear, effective and transparent benefit-sharing mechanisms with broad community support and support from other relevant stakeholders.

Rationale:

- ER Programs should use clear and transparent benefit-sharing mechanisms;
- The design of the benefit-sharing mechanisms should respect customary rights to lands and territories and reflect broad community support, so that REDD+ incentives are applied in an effective and equitable manner.
- The status of rights to carbon and relevant lands should be assessed to establish a basis for successful implementation of the ER Program.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

Criteria here should ensure the quality of the process to develop benefit-sharing mechanisms and explain how the mechanisms are linked with consultation, transparency, and participation work under SESA and otherwise in the readiness phase. (The relationship between the Benefit-Sharing Plan and the FGRM is addressed in the FGRM criteria within the Safeguards section.)

Criterion 29: The ER Program provides a description of the benefit-sharing arrangements for the ER Program, including information specified in Indicator 30.1, to the extent known at the time.

Criterion 30: The Benefit Sharing Plan will elaborate on the benefit-sharing arrangements for Monetary and Non-Monetary Benefits, building on the description in the ER Program Document, and taking into account the importance of managing expectations among potential Beneficiaries.

Indicator 30.1: The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program¹². The Benefit-Sharing Plan contains the following information:

- i. The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to

¹² If a final Benefit-Sharing Plan is not provided at the time of ERPA signature, it becomes a condition precedent which must be fulfilled in order for the sale and purchase obligations under the ERPA to become effective.

effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations.

- ii. Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.
- iii. Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves.

Criterion 31: The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate.

Indicator 31.1: The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program.

Criterion 32: The implementation of the Benefit-Sharing Plan is transparent.

Indicator 32.1: Information on the implementation of the Benefit-Sharing Plan is annexed to each ER Program monitoring report and interim progress report and is made publicly available.

Criterion 33: The benefit-sharing arrangement for the ER Program reflects the legal context.

Indicator 33.1: The design and implementation of the Benefit-Sharing Plan comply with relevant applicable laws, including national laws and any legally binding national obligations under relevant international laws.

5.3 Non-Carbon Benefits

“Programmatic Element 6: Non-carbon benefits

The ER Program contributes to broader sustainable development. This could include, but is not limited to, improving local livelihoods, building transparent and effective forest governance structures, making progress on securing land tenure and enhancing or maintaining biodiversity and/or other ecosystem services. The ER Program should monitor and report on these non-carbon benefits as feasible, taking note of existing and emerging guidance on monitoring of non-carbon benefits by the UNFCCC, CBD, and other relevant platforms.

- ER Programs inherently provide social and environmental Benefits beyond carbon and the mitigation of social and environmental risks.
- ER Programs are encouraged to further enhance non-carbon benefits, to contribute to broader sustainable development; and to measure non-carbon benefits in simple and cost-effective ways where feasible.”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

The non-carbon aspects are an integral part of any ER Program. ER Programs should review potential Non-Carbon Benefits, identify a set of priority Non-Carbon Benefits, and report information on the generation or enhancement of such priority Non-Carbon Benefits. Priority Non-Carbon Benefits shall only be described in the ER Program Document and, as relevant, any Safeguards Plans.

Criterion 34: Non-Carbon Benefits are integral to the ER Program.

Indicator 34.1: The ER Program outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits. Such priority Non-Carbon Benefits should be culturally appropriate, and gender and inter-generationally inclusive, as relevant.

Indicator 34.2: Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits.

Criterion 35: The ER Program indicates how information on the generation and/or enhancement of priority Non-Carbon Benefits will be provided during ER Program implementation, as feasible.

Indicator 35.1: The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits¹³, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS.

¹³ Community participation in these methods is referred to in Criterion 16.

Indicator 35.2: Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available.

6. ER PROGRAM TRANSACTIONS

6.1 ERPA Signing Authority and Transfer of Title to ERs

“Programmatic Element 5: Benefit Sharing” contains, in its rationale, the following:
“The status of rights to carbon and relevant lands should be assessed to establish a basis for successful implementation of the ER Program”.

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

An ER Program needs to transfer Title to ERs to the Carbon Fund. Title to ERs may not be entirely clear in many countries at the start of ER Program design. Hence the ER Program design phase may provide opportunities for finding solutions to perceived uncertainty regarding Title to ERs, potentially including the use of sub-arrangements¹⁴ with potential rights-holders and/or benefit-sharing arrangements under the Benefit-Sharing Plan. Sub-arrangements are anticipated to play an important role in helping the ER Program Entity demonstrate its ability to transfer Title to ERs, and in clarifying how potential rights-holders may be included in the benefit-sharing arrangements.

Prior to ERPA negotiations, the ER Program Entity must be able to demonstrate that it has the authority to enter into an ERPA. At the time of ERPA signature or, at the latest, at the time of ER transfer, the ER Program Entity needs to demonstrate that it has the ability to transfer Title to ERs to the Carbon Fund.

Criterion 36: The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund.

Indicator 36.1: The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through:

- i. Reference to an existing legal and regulatory framework stipulating such authority; and/or
- ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority.

Indicator 36.2: The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion 28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including

¹⁴ The term "sub-arrangement" refers to any agreements, contracts, or other arrangements between the ER Program Entity and one or more relevant potential rights-holder(s).

those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan.

Indicator 36.3: The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund. If this ability to transfer Title to ERs is still unclear or contested at the time of transfer of ERs, an amount of ERs proportional to the Accounting Area where title is unclear or contested shall not be sold or transferred to the Carbon Fund¹⁵.

6.2 Data Management and ER Transaction Registries

“Programmatic Element: Consistency with UNFCCC principles of transparency and completeness”

-- FMT Note 2012-8: Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (2012)

Context and Rationale for the C&I:

A comprehensive national or centralized REDD+ Programs and Projects Data Management System is necessary to ensure appropriate ER Program documentation and transparency. An ER transaction registry is required to offer assurance against double counting and provide transparency to the public that there is no double claiming of the environmental benefit, in respect of the GHG emission reductions or removals. An ER transaction registry should ensure that each ER is appropriately issued, serialized, transferred, retired, and/or cancelled; provide clear linkages to other information included in an ER Programs and Projects Data Management System; and ensure that ERs are not issued, counted, or claimed by more than one entity.

Criterion 37: Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.

Indicator 37.1: Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf.

In either case of a country’s use of a third party centralized REDD+ Programs and Projects Data Management System, or a country’s own national REDD+ Programs and Projects Data Management System, the indicators below apply:

¹⁵ If Title to ERs becomes contested after the transfer of ERs to the Carbon Fund has occurred, the ERPA should provide for appropriate remedies, including the potential use of a buffer reserve.

Indicator 37.2: A national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including:

- i. The entity that has Title to ERs produced;
- ii. Geographical boundaries of the ER Program or project;
- iii. Scope of REDD+ activities and Carbon Pools; and
- iv. The Reference Level used.

An ER Program for the Carbon Fund should report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is.

Indicator 37.3: The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country (other means may be considered as required).

Indicator 37.4: Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund.

Criterion 38: Based on national needs and circumstances, ER Program host country selects an appropriate arrangement to ensure that any ERs from REDD+ activities under the ER Program are not generated more than once; and that any ERs from REDD+ activities under the ER Program sold and transferred to the Carbon Fund are not used again by any entity for sale, public relations, compliance or any other purpose.

Indicator 38.1: Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf.

Indicator 38.2: The national or centralized ER transaction registry reports ERs for the Carbon Fund using the accounting methods and definitions described above in the MF.

Indicator 38.3: An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.

Indicator 38.4: Operational guidance exists, or is in advanced stage of preparation, that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry.

7. GLOSSARY

1. Accounting Area: area for which a reference level is established and over which emissions and removals from forests or select REDD+ Activities are being measured, reported and verified consistently.
2. Beneficiaries: recipients of Monetary and Non-Monetary Benefits identified in the Benefit Sharing Plan. Beneficiaries may include sub-Entities and other relevant stakeholders (including, e.g., forest-dependent Indigenous Peoples and other forest dwellers, affected communities or groups, local civil society organizations, etc.) and may have to be updated from time to time.
3. Benefit-Sharing Plan: a plan developed by the ER Program Entity in accordance with the ER Program Document and Methodological Framework and submitted to the Trustee on how the ER Program Entity will share the Monetary and Non-Monetary Benefits with Beneficiaries.
4. Buffer ERs: ERs generated and verified under the ER Program that are deposited in the ER Program CF Buffer based on a Reversal risk assessment and/or to reflect the level of uncertainty, and that shall not be traded or transferred during the Term of the ERPA, unless expressly provided for otherwise in the Methodological Framework.
5. Carbon Pools: components of the climate system where carbon is stored, i.e., reservoirs of carbon. In the context of the Carbon Fund Methodological Framework, Carbon Pools are:
 - a. Above ground biomass
 - b. Below ground biomass
 - c. Dead wood
 - d. Litter
 - e. Soil organic carbon.
6. Carbon Stocks: the average carbon stock during the Reference Period expressed in tCO₂e and estimated as the sum of the areas of each forest type in the Accounting Area times the corresponding emission factor for deforestation for that type.
7. Displacement: Emissions occurring outside the ER Program Accounting Area as a consequence of land use activities moving from inside the Accounting Area to an area outside the Accounting Area. Displacement is typically caused through (i) activity shifting (e.g., related to the movement of subsistence agriculturalists in response to limits on their practices due to the ER Program Interventions), or (ii) market effects, related to deforestation or degradation causing commodity production to move to other regions in market response to reduced supply due to implementation of the REDD+ activities, e.g. conserving agricultural or timber lands.

8. Emission Reductions and Removals (ERs): difference between the ER Program Reference Level and the ER Program emissions and/or removals which have been measured, reported and verified consistently.
9. Emission Reductions Payment Agreement (ERPA): an agreement governing the acquisition and transfer of Emission Reductions entered into between the Trustee of the Carbon Fund and a REDD Country Participant or an entity approved by a REDD Country Participant.
10. ER Program: the program described in the ER Program Document.
11. ER Program CF Buffer: an ER Program-specific buffer reserve account in an ER registry agreed upon between the parties to the ERPA that is managed by the Carbon Fund and serves as a mechanism to manage the risks of Reversals (and potentially other risks for which a buffer reserve may be established in accordance with the terms of the Methodological Framework) during the Term of the ERPA.
12. ER Program Entity: the party or parties specified as such in the ERPA, who enters into an ERPA with the World Bank as the trustee of the Carbon Fund.
13. ER Program Measures: policies, measures or projects to reduce deforestation and/or forest degradation and enhance and conserve carbon stocks that directly address the key drivers of deforestation and degradation, and are described in the ER Program Document (e.g., subsidies for reforestation, investments in agricultural intensification, land-use planning, etc.).
14. ER Program Monitoring Plan: the plan referred to as such and incorporated in the ER Program Document that guides the ER Program Entity in its ER Monitoring activities and ensures that all data collection and management systems are in place to allow subsequent successful ER Monitoring and verification of ERs generated under the ER Program.
15. Feedback and Grievance Redress Mechanism (FGRM): a mechanism to accept, assess, and resolve stakeholder feedback or complaints related to the preparation and implementation of the ER Program.
16. Forest Monitoring System: an operational system capable of meeting the data and accuracy requirements of the Methodological Framework used by the ER Program for Monitoring and reporting on ERs or reductions in emissions and increases in removals generated under the ER Program (including the occurrence of any Reversal event).

17. Jurisdictional scale: a geographical area encompassing one or more administrative units.
18. Measurement: the assignment of numbers to objects. All measurements consist of three parts: magnitude, dimensions (units) and uncertainty. In the case of the Carbon Fund Methodological Framework, the following variables will have to be measured along with their associated accuracy:
 - a. forest area, and forest area change (activity data),
 - b. carbon stock, and carbon stock change (emission factors)
19. Monetary and Non-Monetary Benefits: any (1) monetary or non-monetary goods, services or other benefits related to payments received under the ERPA by the ER Program Entity, or funded with such received payments, and (2) other monetary or non-monetary benefits which (i) are directly related to the implementation and operation of the ER Program, (ii) provide a direct incentive to Beneficiaries to help implement the ER Program, and (iii) can be monitored in an objective manner. Such Benefits shall be specified in the ER Program Document, the Benefit-Sharing Plan and, as relevant, the Safeguards Plans.
20. Monitoring: repeated measurements, collection, compilation and recording of all relevant data necessary for estimating ERs generated under the ER Program (including the occurrence of any Reversal event); and for conducting verification in accordance with the ER Program Monitoring Plan. Monitoring is performed in a systematic (using standard operating procedures) and consistent (using the same or comparable operational procedures) fashion, in accordance with the National Forest Monitoring System and the Methodological Framework.
21. National Forest Monitoring System: a system used by a REDD+ Country Participant for Monitoring and reporting on REDD+ Activities, programs, projects and interventions related to the implementation of its national REDD+ strategy (in line with the relevant provisions of Decisions 4/CP.15 (Paragraph 71) and 1/CP.16 of the United Nations Framework Convention on Climate Change (UNFCCC)).
22. Non-Carbon Benefits: any benefits produced by or in relation to the implementation and operation of the ER Program, other than ERs and Monetary and Non-Monetary Benefits, as specified in the ER Program Document, and, as relevant, any Safeguards Plans. Such Non-Carbon Benefits may include, but not be limited to, the improvement of local livelihoods, building of transparent and effective forest governance structures, making progress on securing land tenure, and enhancing or maintaining biodiversity and/or other ecosystem services.
23. REDD+ Activities: activities listed in Decision 1/CP.16, para 70 as follows:
 - a. Reducing emissions from deforestation
 - b. Reducing emissions from forest degradation
 - c. Enhancement of forest carbon stocks
 - d. Conservation of carbon stocks

- e. Sustainable management of forest.
-
- 24. REDD+ Programs and Projects Data Management System: a system that supports registering and reporting on REDD+ projects and programs intended to generate Emission Reductions.
 - 25. Reference Level: an amount of emissions from the Accounting Area, expressed in tonnes of carbon dioxide equivalent per year, relative to which ERs are measured, reported and verified.
 - 26. Reference Period: time period for which historical emissions and removals from carbon stocks changes from forests or select REDD+ Activities are estimated to establish the Reference Level.
 - 27. Reversals: a situation where the cumulative monitored and verified ERs are less than the currently transferred ERs, i.e., at any point in time more ERs have been transferred than is warranted by the underlying reported and verified results of the ER Program.
 - 28. Safeguards Plan: document that describes the actions to be taken by the ER Program Entity during the implementation and operation of the ER Program to eliminate, offset or reduce adverse environmental and social impacts and to enhance positive environmental and social impacts and opportunities in accordance with World Bank requirements. Depending on the results of the World Bank's safeguards due diligence, these documents may include, among others, e.g., an Environmental Management Plan, a Resettlement Action Plan and/or an Indigenous Peoples Plan.
 - 29. Term of the ERPA: the period in which the ERPA is in force.
 - 30. Title to ERs: The full legal and beneficial title and exclusive right to ERs contracted for under the ERPA. NB: It is important for the Trustee to ensure that the ERs acquired by the Carbon Fund are free of dispute and the legal title to the ERs is transferred to the Trustee in accordance with the ERPA. However, the definition relates to the ERs only. In particular, it does not entail any rights, titles or interests to land and territories.

Annex 1: Relationship of the Methodological Framework to related FCPF and World Bank processes

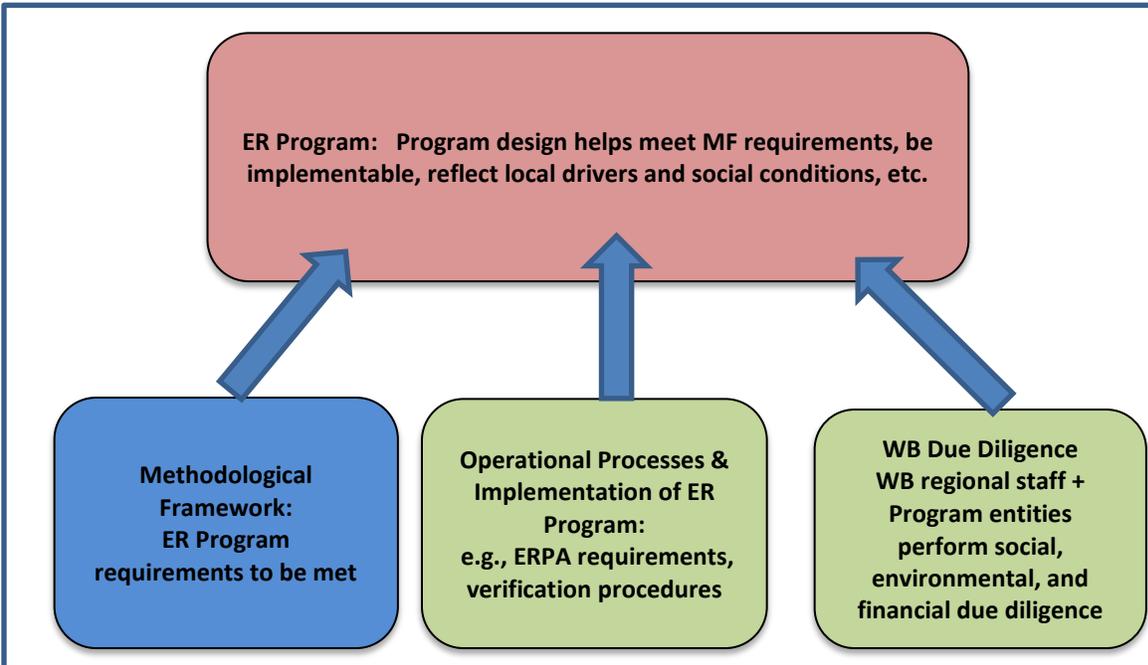


Figure 1.1: The MF is one part of guidance and operational due diligence for ER Programs

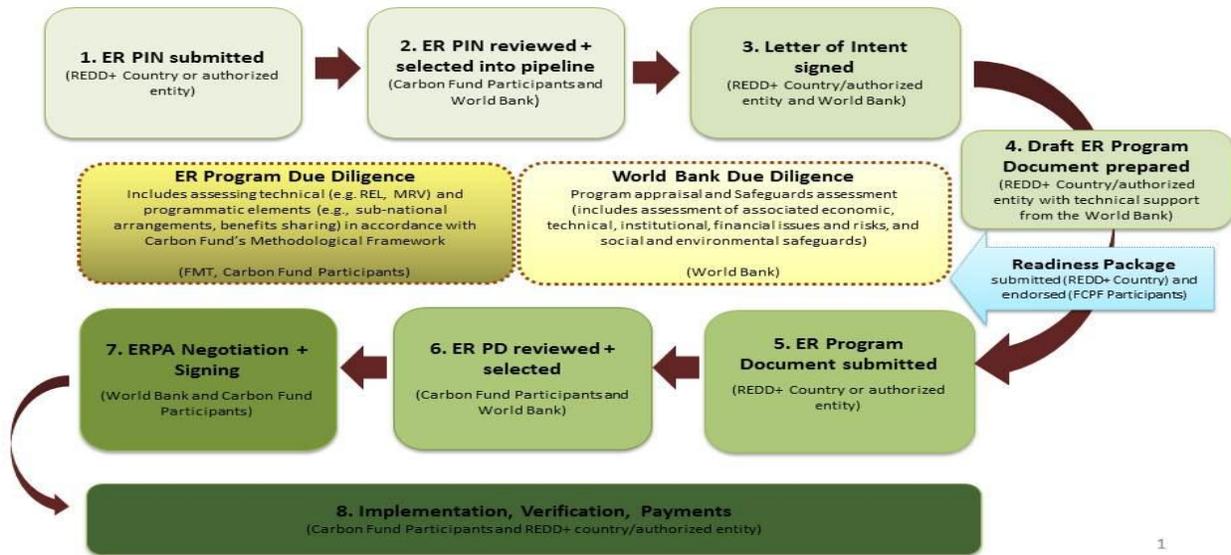


Figure 1.2 The Carbon Fund ER Program role in the business process

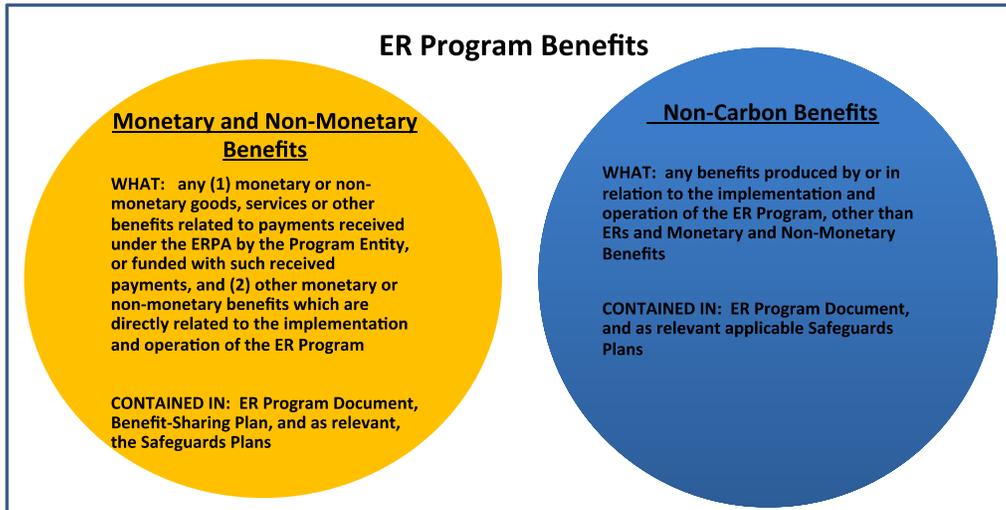


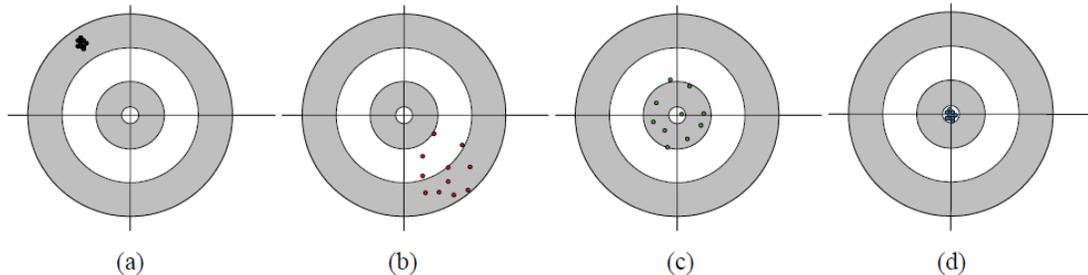
Figure 1.3: The relationship of Non-Carbon Benefits to Monetary and Non-Monetary Benefits within the ER Program

Annex 2: Other useful definitions

1. **Accuracy:** describes agreement between the reported value and the true value. For carbon accounting, this specifically refers to repeated measured observations or estimations of a quantity, relevant for quantitative estimates of carbon stocks and flows.

An accurate measurement or prediction lacks bias or, equivalently, systematic error (defined below). Estimates should be accurate in the sense that they are systematically neither over nor under true emissions or removals, so far as can be judged, and that uncertainties are reduced so far as is practicable. Appropriate methodologies conforming to guidance on good practices should be used to promote accuracy in inventories. Accuracy should be distinguished from precision as illustrated below.

Illustration of accuracy and precision: (a) inaccurate but precise; (b) inaccurate and imprecise; (c) accurate but imprecise; and (d) precise and accurate.



2. **Activity (IPCC):** a practice or ensemble of practices that take place on a delineated area over a given period of time.
3. **Activity data:** data on the magnitude of human activity (e.g., land use and land use changes related to forests) resulting in emissions or removals taking place during a given period of time¹⁶.
4. **Comparability:** means that estimates of emissions and removals reported by countries in inventories should be comparable among countries. For this purpose, countries should use agreed methodologies and formats for estimating and reporting inventories.
5. **Completeness:** helps assure that ER Programs consider all the relevant information. For carbon accounting, this includes carbon pools and categories of activities producing emissions or removals of carbon for reporting on the implementation of REDD+ Activities. For programmatic elements, this includes information on how the UNFCCC safeguards are being addressed and respected.

¹⁶ IPCC defines activity data as “data on the magnitude of a human activity resulting in emissions or removals taking place during a given period of time.” Data on energy use, metal production, land areas, management systems, and lime and fertilizer use are examples of activity data.

6. Confidence Interval: the true value of the quantity for which the interval is to be estimated is a fixed but unknown constant, such as the annual total emissions in a given year for a given country. The confidence interval is a range that encloses the true value of an unknown fixed quantity with a specified confidence (probability).

For example, a 95 per cent confidence interval has a 95 per cent probability of enclosing the true but unknown value of the quantity. An alternative interpretation is that the confidence interval is a range that may safely be declared to be consistent with observed data or information. The 95 per cent confidence interval is enclosed by the 2.5th and 97.5th percentiles of the probability distribution function.

7. Consistency: provides for use of similar methods to enhance comparisons across ER Programs, and over time within an ER Program, taking into account Accounting Element 1 on stepwise approach.
8. Criteria (ISO): criteria are the content level of a standard which set out the conditions which need to be met in order to deliver a principle. It can be possible to verify criteria directly but they can also be further elaborated through indicators. In the case of the Methodological Framework, the set of criteria allow the Carbon Fund to judge or decide whether or not the ER Program meets methodological requirements of the FCPF Carbon Fund.
9. Emission Factor: a coefficient that quantifies the emissions or removals of a gas per unit REDD+ activity. Emission factors are often based on a sample of measurement data, averaged to develop a representative rate of emission for a given level of land use changes related to forests under a given set of operating conditions.
10. Emissions: the release of carbon dioxide into the atmosphere over a specified area and period of time. The release of other greenhouse gases can be considered as feasible¹⁷.
11. Forest Reference Emission Level or Forest Reference Level: forest reference emission level and/or forest reference level expressed in tonnes of carbon dioxide equivalent per year that is a benchmark for assessing each country's performance in implementing REDD+ Activities under the UNFCCC.
12. Good Practice: is a set of procedures intended to ensure that criteria of the Methodological Framework are fulfilled and information on indicators is produced in adequate fashion.

¹⁷ Emissions (IPCC): The release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time. (UNFCCC Article 1.4)

13. Guidance: a set of documents and tools that detail and explain how to apply good practice.
14. Indicators (ISO): quantitative or qualitative parameters which can be achieved and verified in relation to a criterion. In the case of the Methodological Framework, an indicator would provide information on the state or condition of a criterion. NB: It is generally accepted that a good indicator should be Specific, Measurable, Attainable, Relevant and Time-bound (SMART).
15. IPCC Approach 3: Approach 3 is characterized by spatially explicit observations of land-use categories and land-use conversions, often tracking patterns at specific point locations and/or using gridded map products, such as derived from remote sensing imagery. The data may be obtained by various sampling, wall-to-wall mapping techniques, or combination of the two methods.
16. IPCC sub-categories related to forests:
 - a. Forests converted to other lands
 - b. Forests remaining as forests
 - c. Other lands converted to forests.
17. IPCC Tier 1 methods: use of the basic method and the default emission factors provided in the IPCC Guidelines (Workbook and Reference Manual). Tier 1 methodologies usually use activity data that are spatially coarse, such as national or global deforestation rates, agricultural production statistics, and global land cover maps.
18. IPCC Tier 2 methods: use of the same methodological approach as Tier 1 but applies emission factors and activity data which are defined by the host country for the most important land uses or activities. Tier 2 can also apply stock change methodologies based on host country-specific data. Host country-defined emission factors or activity data are more appropriate for the climatic regions and land use systems in that country. Higher resolution activity data are typically used in Tier 2 to correspond with country-defined coefficients for specific regions and specialised land-use categories.
19. National Forest Monitoring System: a system used by a REDD+ Country Participant for monitoring and reporting on REDD+ Activities, programs, projects and interventions related to the implementation of its national REDD+ strategy (in line with the relevant provisions of Decisions 4/CP.15 (Paragraph 71) and 1/CP.16 of the United Nations Framework Convention on Climate Change (UNFCCC)).
20. Quality Assurance Quality Assurance (QA): activities include a planned system of review procedures conducted by personnel not directly involved in the inventory compilation and development process to verify that data quality objectives were met, ensure that the inventory represents the best possible estimate of emissions and sinks given the current state of scientific knowledge and data available, and support the effectiveness of the quality control (QC) programme.

21. Quality Control Quality Control (QC): is a system of routine technical activities, to measure and control the quality of the inventory as it is being developed. The QC system is designed to:
- i. Provide routine and consistent checks to ensure data integrity, correctness, and completeness;
 - ii. Identify and address errors and omissions;
 - iii. Document and archive inventory material and record all QC activities.
- QC activities include general methods such as accuracy checks on data acquisition and calculations and the use of approved standardised procedures for emission calculations, measurements, estimating uncertainties, archiving information and reporting. More detailed QC activities include technical reviews of source categories, activity and emission factor data, and methods.
31. REDD+ programs or projects: a set of interventions aimed at changing the dynamics of deforestation and/or forest degradation and/or increasing forest carbon stocks, within a geographically defined area, in order to reduce emissions and/or increase removals of greenhouse gas emissions associated with these dynamics in order to value these emission reductions or removals in a results-based payment mechanism (carbon market or other).
32. Removals: removal of carbon dioxide (CO₂) from the atmosphere by a sink.
33. Safeguards Information System (SIS): a national system for providing information on how the Cancun safeguards are addressed and respected, as contained in UNFCCC Decision 12/CP.17 (<http://unfccc.int/resource/docs/2011/cop17/eng/09a02.pdf#page=16>, page 16/17).
34. Sink: any process, activity or mechanism which removes a greenhouse gas, an aerosol, or a precursor of a greenhouse gas from the atmosphere (from UNFCCC Article 1.8).
35. Source: any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere (from UNFCCC Article 1.9).
22. Systematic Error and Random Error (IPCC): the difference between the true, but usually unknown, value of a quantity being estimated, and the mean observed value as would be estimated by the sample mean of an infinite set of observations. The random error of an individual measurement is the difference between an individual measurement and the above limiting value of the sample mean.
23. Transparency: provides for transparent and consistent information accessible by relevant stakeholders on the assumptions, data collected, and methods used by an ER Program, other than

confidential business information, to allow assessment of the credibility and reliability of data and assumptions.

24. Uncertainty (IPCC): lack of knowledge of the true value of a variable (e.g., reductions in emissions or increases in removals) that can be described as a probability density function characterizing the range and likelihood of possible values. Uncertainty depends on the analyst's state of knowledge, which in turn depends on the quality and quantity of applicable data as well as knowledge of underlying processes and inference methods.