ER Program Buffer Guidelines

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1.0 Introduction

Through its Carbon Fund, the FCPF is seeking to pilot the implementation of REDD+ ER Programs in a diverse set of countries, via the use of positive incentives. Specifically, CF Participants will fund forest carbon Emission Reductions achieved by discrete, country-level REDD+ ER Programs. The terms of such funding will be stipulated in an ERPA signed for each ER Program.

The ERs achieved by a REDD+ ER Program are subject to both Uncertainty and Reversal Risks. Specifically:

1. Improved observation methods and data, may indicate that the emission reduction were overestimated for prior reporting periods.
2. Certain physical disturbances may cause forest carbon emissions that reduce the total number of ERs achieved.

To help manage these risks, the CF may rely on an ER Program CF Buffer to be managed by the Buffer Manager. As part of the ER Program CF Buffer, two (2) separate buffer reserve accounts will be established, which are ER Program-specific:

1. an 'Uncertainty Buffer' to create incentives for improving uncertainty associated with the estimation of ERs and manage the risk that the emission reductions were overestimates for prior reporting periods,
2. a 'Reversal Buffer' to insure against potential Reversals (ER Program-specific).

In addition to the ER Program CF Buffer, the Buffer manager will also establish a 'Pooled Reversal Buffer' account to insure against potential large scale Reversals which exceed the amount of ERs set aside in the Reversal Buffer (pooled across all ER Programs for which an ERPA has been signed).

As detailed in these Guidelines, the proportion of ERs that must be set-aside in each buffer reserve account may change depending on quantification improvements or revisions to Reversal Risk assessments. ERs that were set-aside for an initial reporting period may be released after subsequent reporting periods pending such improvements or revisions. Thus, the buffer reserves serve a dual purpose of both insuring against potential losses and providing incentives for improved quantification (reduction in Uncertainty) and management of Reversal Risks.

The Guidelines provide rules and procedures for:

1. Establishing buffer reserve accounts in an ER Program registry
2. Allocating ERs to buffer reserve accounts
3. Managing the buffer reserves, including:
    a. Procedures for cancelling ERs from buffer reserve accounts in the case of losses due to improved quantification or Reversals
    b. Procedures for releasing ERs from buffer reserve accounts when warranted by improved quantification accuracy or a reduced Reversal Risk profile

c. Procedures for disposing of buffer reserve ERs at the end of an ERPA term

In the event that any transaction of ERs under any ER Program will be carried out by a specific registry which provides for its own buffer rules and procedures such registry's buffer rules and procedures may prevail, if such an arrangement is agreed in the ERPA.

2.0 Use of ER Program Transaction Registries to Manage Buffer Reserves

2.1 Criterion 19 of the MF gives ER Programs the option to manage Reversal Risks through the use of an ER Program CF Buffer managed by the Buffer Manager. Likewise, Criterion 22 indicates that an ER Program CF Buffer may be used to hold a set-aside of ERs in order to account for quantification Uncertainty.

2.2 Criterion 38 of the MF stipulates that ER Programs should ensure that ERs are not double-counted (or "generated more than once") and that ERs sold and transferred to the CF are not used or claimed by any other entity for any other purpose. These assurances may be achieved through the establishment and/or use of an "ER Transaction Registry" that meets certain criteria and can perform functions in accordance with the methods and definitions of the MF (Indicators 38.1-38.4), an ER Program Entity may establish its own ER Transaction Registry or use a "centralized" ER Transaction Registry managed by a third party on its behalf (Indicator 38.1).

2.3 ER Programs that choose to manage Reversal Risks and Uncertainty through the use of an ER Program CF Buffer should establish buffer reserve accounts for this purpose in an appropriate ER Transaction Registry.

2.4 Two (2) separate buffer reserve accounts should be established, which together will comprise the ER Program CF Buffer:

- An ER Program-specific Uncertainty Buffer account to hold ERs set aside for the purpose of managing Uncertainty.
- An ER Program-specific Reversal Buffer account to hold ERs set aside for the purpose of managing Reversal Risks.

2.5 In addition, the CF will instruct one Buffer Manager to establish a Pooled Reversal Buffer account to hold ERs set aside for the purpose of managing Reversal Risks that, if materialized, may exceed the amount of ERs set aside in the Reversal Buffer account (pooled across all ER Programs for which an ERPA has been signed).

2.6 The Buffer Manager will manage these accounts in accordance with the Guidelines to manage Uncertainty and Reversal Risks, respectively, and to dispose of ERs set aside in these accounts at the end of an ERPA term.

3.0 Establishing Buffer Reserve Accounts in the ER Program Transaction Registry

3.1 At the outset of an ER Program, separate accounts must be created in an appropriate ER Transaction Registry for the exclusive purpose of receiving, disbursing, or canceling ERs that will be allocated to the Uncertainty Buffer, the Reversal Buffer and the Pooled Reversal Buffer.

3.2 The Reversal Buffer and the Pooled Reversal Buffer accounts will exist separately from any reversal risk management accounts established under an ER Program to manage reversal risks for ERs that are not subject to the ERPA and which, therefore, will not be transferred to the CF.

3.3 The Buffer Manager should be given sole authority to access and manage the Uncertainty Buffer, Reversal Buffer and Pooled Reversal Buffer accounts, such that transfers of ERs to and from the accounts, and cancelation of ERs from the accounts, may only be initiated by the Buffer Manager.

3.4 The technical requirements and modalities for managing the Uncertainty Buffer, Reversal Buffer and Pooled Reversal Buffer accounts will be elaborated in the operational guidance established for the ER Transaction Registry, in accordance with Criterion 38 (Indicator 38.4) of the MF.

4.0 Allocation of ERs to the Buffer Reserve Accounts

4.1 Each time ERs are reported and verified, a portion of the reported ERs must be set aside in the Uncertainty Buffer, Reversal Buffer and Pooled Reversal Buffer accounts.

4.2 Once Total ERs are determined for a particular reporting period, the ER Program Entity and/or Trustee should instruct, or help instruct, as applicable, the administrator of the ER Transaction Registry to establish serial numbers for the amount of Total ERs.

4.3 The ER Program Entity, Trustee or Buffer Manager should instruct, or help instruct, as applicable, the ER Transaction Registry administrator to transfer and deposit a portion of the serialized ERs, as Buffer ERs, into the Uncertainty Buffer account. This portion should be determined following Section 5.0 of these Guidelines.

4.4 The ER Program Entity, Trustee or Buffer Manager should instruct, or help instruct, as applicable, the ER Transaction Registry administrator to transfer and deposit a separate portion of the serialized ERs, as Buffer ERs, into the Reversal Buffer account. This portion should be determined following Section 6.0 of these Guidelines.

4.5 The ER Program Entity, Trustee or Buffer Manager should instruct, or help instruct, as applicable, the ER Transaction Registry administrator to transfer and deposit a separate portion of the serialized ERs, as Buffer ERs, into the Pooled Reversal Buffer account. This portion should be determined following Section 6.0 of these Guidelines.

4.6 The ER Program Entity or Trustee should instruct, or help instruct, as applicable, the ER Transaction Registry administrator to transfer from the remaining serialized ERs an amount of ERs contracted for under an ERPA and designated for transfer to the CF, as Contract ERs or Additional ERs, into one or more account(s) designated to hold ERs.

5.0 Determining the Quantity of ERs to Allocate to the Uncertainty Buffer

5.1 Uncertainty of Emission 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. If non-integrated approaches are used, separate quantities should be determined for the portion of Total ERs that resulted from avoided deforestation and avoided forest degradation respectively.

5.2 The quantity of Total ERs associated with avoided deforestation should be multiplied by the appropriate "conservativeness factor" for the aggregate uncertainty of the estimate for Total ERs, as presented in the following table (from Criterion 22 of the Methodological Framework). If an integrated approach is used to measure deforestation, forest degradation and/or enhancements together, the conservativeness factor (Table 1) is applied to the Total ERs only if spatially-explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) were used in their calculation.

5.3 If forest degradation is measured through a separate approach using proxy-based approaches, a general conservativeness factor of 15% is applied to the Total ERs associated with forest degradation.

Table 1. Quantification Uncertainty Conservativeness Factors

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

5.4 The portion of Total ERs allocated as Buffer ERs to the Uncertainty Buffer should be equal to the sum of the two amounts calculated in clause 5.2 and 5.3 of these Guidelines.

6.0 Determining the Quantity of ERs to Allocate to the Reversal Buffer and the Pooled Reversal Buffer

6.1 Reversals can be caused both by natural disturbances and by human activities, which may be driven by a range of factors both internal and external to an ER Program.

6.2 In addition to the amount of Contract ERs and Additional ERs designated for transfer to the CF, a certain additional quantity of ERs out of the Total ERs should be allocated as Buffer ERs to the Reversal Buffer and the Pooled Reversal Buffer account to help manage the Reversal Risk. This additional quantity is calculated as a percentage of the Contract ERs and Additional ERs designated for transfer to the CF.

6.3 The percentage of Contract ERs and Additional ERs to be set aside in the Reversal Buffer and Pooled Reversal Buffer accounts should be determined by the Trustee, following consultations with the Program Entity, or by the Buffer Manager, as applicable, in accordance with the following Reversal Risk assessment tool:

Table 2. Determination of Reversal Risk Set-Aside Percentage

Risk Factors	Examples of Risk Indicators	Default percentage	Discount	Resulting percentage
Default risk	• Not applicable, fixed minimum amount	**10%**	**Not applicable**	**10%**
A. Lack of broad and sustained stakeholder support	• Are stakeholders aware of, and/or have positive experience with FGRM, benefit sharing plans etc.	**10%**	Risk is considered high: 0% discount; **OR**	**10%**

	or similar instruments in other contexts? • Have occurrences of conflicts over land and resources been addressed?		Risk is considered medium: 5% discount; **OR**	**5%**
			Risk is considered low: 10% discount	**0%**
B. Lack of institutional capacities and/or ineffective vertical/cross sectoral coordination	• Is there a track record of key institutions in implementing programs and policies? • Is there experience of cross-sectoral cooperation? • Is there experience of collaboration between different levels of government?	**10%**	Risk is considered high: 0% discount; **OR**	**10%**
			Risk is considered medium: 5% discount; **OR**	**5%**
			Risk is considered low: 10% discount	**0%**
C. Lack of long term effectiveness in addressing underlying drivers	• Are there experience in decoupling deforestation and degradation from economic activities? • Is relevant legal and regulatory environment conducive to REDD+ objectives?	**5%**	Risk is considered high: 0% discount; **OR**	**5%**
			Risk is considered medium: 2% discount; **OR**	**3%**
			Risk is considered low: 5% discount	**0%**
D. Exposure and vulnerability to natural disturbances	• Is the Accounting Area prone to fire, storms, droughts, etc?	**5%**	Risk is considered high: 0% discount; **OR**	**5%**

	• Are there capacities for preventing natural disturbances or mitigating[1] their impacts?		Risk is considered medium: 2% discount; **OR**	**3%**
			Risk is considered low: 5% discount	**0%**
Actual Set-Aside Percentage: 10+(Result A+ Result B+ Result C+ Result D) = 10 to 40%				

6.4 From the actual set-aside percentage for Reversal Risks, as determined in accordance with Table 2 above, half of the Default Risk percentage of 10% (i.e. 5% of Contract ERs and Additional ERs) should be deposited as Buffer ERs into the Pooled Reversal Buffer account while the remainder of the actual set-aside percentage for Reversal Risks should be deposited as Buffer ERs into the Reversal Buffer account.

6.5 In determining the actual set-aside percentage for Reversal Risks after each reporting period, the Trustee and the Buffer Manager, as applicable, should take into account the results of any related assessment done by another entity or body authorized by and acting on behalf of the CF (e.g.; Technical Advisory Panel assessments).

7.0 Adjustments to the Uncertainty Buffer if the Aggregate Uncertainty of Total ERs is Reduced

7.1 If an ER Program improves its MRV system, including data sampling or measurement techniques, such that the aggregate quantified Uncertainty of Total ERs is reduced compared to the prior reporting period, it may qualify for a lower conservativeness factor, as indicated in Table 1 (above), for the current reporting period.

[1] Activities to mitigate natural disturbance may include education to reduce the risk of uncontrolled fires resulting from slash-and-burn agriculture; periodic fuel removal; establishment and maintenance of fire breaks and towers; deployment and maintenance of fire-fighting equipment (for fire risk); planting of diverse and resistant tree species (for risk of pests or disease); planting of frost, drought, flood, or wind-tolerant species (for extreme weather risk); and use of salinity-tolerant plant species (for salt-water intrusion risk)

7.2 Improved data sampling or measurement techniques should also be used to update estimates for prior reporting periods.

7.3 If the updated estimates for prior reporting periods show that: (1) aggregate Uncertainty of Total ERs for prior reporting periods is reduced such that a lower conservativeness factor would apply to those periods as indicated in Table 1; and (2) the result is a lower estimate of Total ERs for the prior reporting periods, then the Buffer Manager should apply the followings steps:

a) Calculate the quantity of Buffer ERs to be canceled using the following formula:

$$Q_c = G_0 - G_1$$

Where:

Q_c = The quantity of Uncertainty Buffer ERs to be canceled
G_0 = The original estimate of cumulative Total ERs for the prior reporting periods
G_1 = The revised cumulative estimate of Total ERs for the prior reporting periods, after improvements in measurements and respective reduction in uncertainty

b) If Q_c calculated under step a) is greater than the balance of Buffer ERs deposited in the Uncertainty Buffer account for prior reporting periods, then the Buffer Manager should only cancel all Buffer ERs deposited in the Uncertainty Buffer account for prior reporting periods. Buffer ERs should be canceled by removing them from the Uncertainty Buffer account and permanently retiring their associated serial numbers.

c) If Q_c calculated under step a) is less than the balance of Buffer ERs deposited in the Uncertainty Buffer for prior reporting periods, then the potential quantity of Buffer ERs to be released, if any, is calculated as follows:

$$Q_R = D_0 - Q_C - (G_1 * CF_1)$$

Where:

Q_R = The quantity of Uncertainty Buffer ERs to be released
D_0 = The balance of Buffer ERs deposited in the Uncertainty Buffer account for prior reporting periods
Q_C = The quantity of Uncertainty Buffer ERs to be canceled (as per step a)
G_1 = The revised cumulative estimate of Total ERs for the prior reporting periods, after improvements in measurements and respective reduction in uncertainty

CF_1 = The revised conservativeness factor, after improvements in measurements and respective reduction in uncertainty

If Q_R is positive then the Buffer Manager may release ERs from the Uncertainty Buffer equivalent to Q_R and transfer them to an account designated to hold ERs following the instructions of the ER Program Entity or Trustee, as applicable.
If Q_R is negative then no Uncertainty Buffer ERs can be released for prior reporting periods.

7.4 If the updated estimates for prior reporting periods show that: (1) the aggregate Uncertainty of Total ERs for prior reporting periods is reduced such that a lower conservativeness factor would apply to those periods as indicated in Table 1; and (2) the result is an equal or higher estimate of Total ERs for the prior reporting periods, then:

a) As appropriate, Sections 4, 5, and 6 of these Guidelines should be followed to determine a new quantity of Total ERs for the prior reporting periods, as well as revised quantities for allocations to the Uncertainty Buffer, the Reversal Buffer and the Pooled Reversal Buffer.
b) If the revised quantity of required allocations to the Uncertainty Buffer for the prior reporting periods is greater than the original allocation, then additional ERs should be allocated to the Uncertainty Buffer to make up the difference.
c) If the revised quantity of required allocations to the Uncertainty Buffer for the prior reporting periods is less than the original allocation, then the Buffer Manager may release ERs from the Uncertainty Buffer and transfer them to an account designated to hold ERs following the instructions of the ER Program Entity or Trustee, as applicable. The quantity to be released should be equal to the difference between the original and revised allocation requirements.
d) Additional allocations of ERs to the Reversal Buffer and the Pooled Reversal Buffer should be made as necessary, following Section 6 of these Guidelines.

8.0 Disposal of Uncertainty Buffer ERs at the End of the ERPA Term

8.1 If the ER Program Entity does not wish to maintain an uncertainty buffer reserve beyond the end of the ERPA term, then the Buffer Manager should cancel the ERs in the Uncertainty Buffer account in the ER Transaction Registry prior to the end of the ERPA term. ERs should be canceled by removing them from the Uncertainty Buffer account and permanently retiring their associated serial numbers.

8.2 If the ER Program Entity wishes to continue maintaining a buffer reserve serving the same function as the Uncertainty Buffer beyond the end of the ERPA term, then the Buffer Manager should transfer ERs from the Uncertainty Buffer account in the ER Transaction Registry to an equivalent buffer account designated and controlled by the ER Program Entity or any other entity designated by the ER Program Entity prior to the end of the ERPA term.

9.0 Compensating for Reversals Using the Reversal Buffer and the Pooled Reversal Buffer

9.1 The Trustee determines whether a Reversal has occurred and, if so, notifies the Buffer Manager accordingly. A Reversal can only occur if ERs have been transferred to the CF, as Contract ERs and Additional ERs, for at least one prior ER Program reporting period.

9.2 If a Reversal occurs, then Buffer ERs should be canceled from the Reversal Buffer account to compensate for the Reversal.

9.3 The quantity of Buffer ERs canceled from the Reversal Buffer account should be equal to the amount of ERs that have been previously transferred to the CF, as Contract ERs and Additional ERs, and are proportionally affected by the Reversal. The amount of previously transferred Contract ERs and Additional ERs affected by the Reversal should be calculated as follows:

$$R_c = C/T_0 \times (T_1-T_0)$$

Where:
R_c = Quantity of Buffer ERs canceled from the Reversal Buffer account
C = Quantity of Contract ERs and Additional ERs
T_0 = Quantity of Total ERs estimated for prior reporting period
T_1 = Quantity of Total ERs estimated for current reporting period (as an aggregate of ERs accumulated since beginning of the ERPA)

9.4 If the amount of Buffer ERs in the Reversal Buffer account does not suffice to fully compensate for the Reversal, then the shortfall amount of Buffer ERs in the Reversal Buffer account should be covered through an equivalent amount of Buffer ERs from the Pooled Reversal Buffer, provided that the Reversal event, as determined by the Trustee, has been a non-human induced Force Majeure Event, impacting at least 25% of the ER Program Accounting Area.

9.5 Buffer ERs should be canceled by removing them from the Reversal Buffer and Pooled Reversal Buffer account, as applicable, and permanently retiring their associated serial numbers.

9.6 The ER Program Entity, Trustee or Buffer Manager should instruct, or help instruct, as applicable, the ER Transaction Registry administrator to cancel such Buffer ERs in the Reversal Buffer and Pooled Reversal Buffer account, as applicable.

10.0 Releasing ERs from the Reversal Buffer When Reversal Risk Set-Aside Percentages are Reduced

10.1 Reversal Risk assessments after subsequent ER Program reporting periods may, in accordance with Table 2 above, determine a reduced risk exposure than was determined after the previous ER Program reporting period (e.g., from high to medium risk or from medium to low risk). Such reduced risk exposure should reduce the required actual set-aside percentage for Reversal Risks and allow for a release of a corresponding amount of Buffer ERs from the Reversal Buffer.

10.2 If the required amount of Buffer ERs set aside for the Reversal Buffer for the current ER Program reporting period was reduced below the required amount of Buffer ERs set aside in prior ER Program reporting periods, then the Buffer Manager should release Buffer ERs from the Reversal Buffer account in an amount equal to the difference of such required amounts of Buffer ERs and transfer those released Buffer ERs into an account designated to hold ERs, following the instructions of the ER Program Entity or Trustee, as applicable. The quantity of Buffer ERs to be released from the Reversal Buffer account should be determined using the following formula:

$$Q_r = (R_0 - R_1) \times N_0$$

Where:

Q_r	=	The quantity of Buffer ERs to be released from the Reversal Buffer account
R_0	=	The actual set-aside percentage for the Reversal Buffer applied to all reporting periods prior to the current reporting period [2]
R_1	=	The actual set-aside percentage for the Reversal Buffer applicable to the current reporting period
N_0	=	The cumulative total of Contract ERs and Additional ERs for all reporting periods prior to the current reporting period

10.3 If Qr is greater than the number of Buffer ERs currently in the Reversal Buffer account, then the quantity of Buffer ERs remaining in the Reversal Buffer account may be released.

10.4 The required set aside for the current reporting period is calculated following the procedure described in Section 6 above. The respective quantity of Buffer ERs is transferred to the Reversal Buffer account after the quantity of Buffer ERs to be released were transferred out of the Reversal Buffer account.

[2] Because the set-aside percentage is updated and retroactively applied each reporting period, the same percentage should apply to all prior reporting periods.

11.0 Disposal of Buffer ERs in the Reversal Buffer and the Pooled Reversal Buffer at the End of the ERPA Term

11.1 If the ER Program Entity wishes to continue maintaining a buffer reserve serving the same function as the Reversal Buffer beyond the end of the ERPA term, then the Buffer Manager should, prior to the end of the ERPA term:

a) Transfer all Buffer ERs remaining in the Reversal Buffer account in the ER Transaction Registry to such other buffer reserve account designated and controlled by the ER Program Entity or any other entity designated by the ER Program Entity, and

b) Transfer a portion of the Buffer ERs remaining in the Pooled Reversal Buffer account in the ER Transaction Registry (equivalent to the ER Program's proportional share of any amount of Buffer ERs in the Pooled Reversal Buffer remaining at the end the ER Program's ERPA term, but not exceeding the ER Program's original contribution) to such other buffer reserve account designated and controlled by the ER Program Entity or any other entity designated by the ER Program Entity.

11.2 If the ER Program Entity chooses to manage Reversal Risks using policies or mechanisms other than a buffer reserve, then the Buffer Manager should, prior to the end of the ERPA term:

a) Cancel all Buffer ERs remaining in the Reversal Buffer account in the ER Transaction Registry, and

b) Cancel a portion of the Buffer ERs remaining in the Pooled Reversal Buffer account in the ER Transaction Registry (equivalent to the ER Program's proportional share of any amount of Buffer ERs in the Pooled Reversal Buffer remaining at the end of the ER Program's ERPA term, but not exceeding the ER Program's original contribution)

Buffer ERs should be canceled by removing them from the Reversal Buffer and Pooled Reversal Buffer account and permanently retiring their associated serial numbers.

Alternatively, subject to agreement between the Trustee and the ER Program Entity, the Buffer Manager may, instead of cancelling such Buffer ERs from the Reversal Buffer and Pooled Reversal Buffer account, release and transfer them into an account designated to hold ERs, following instructions by the ER Program Entity or Trustee, as applicable.

11.3 If the ER Program will not continue past the ERPA term, then the Buffer Manager should:

a) Cancel all Buffer ERs remaining in the Reversal Buffer account in the ER Transaction Registry, and

b) Cancel a portion of the Buffer ERs remaining in the Pooled Reversal Buffer account in the ER Transaction Registry (equivalent to the proportional share of any amount of Buffer ERs in the Pooled Reversal Buffer remaining at the end of the ER Program's ERPA term).

ERs should be canceled by removing them from the Reversal Buffer account and permanently retiring their associated serial numbers.

12.0 Acronyms

CF	Carbon Fund
ERs	Emission Reductions
ERPA	Emission Reductions Payment Agreement
IBRD	International Bank for Reconstruction and Development
FCPF	Forest Carbon Partnership Facility
MF	Methodological Framework of the Carbon Fund dated December 20, 2013

13.0 Glossary

Accounting Area	ER Program 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.
Additional ERs	ERs that have been generated and Verified under the ER Program within the ER Program Accounting Area and for which the Grantee has been granted an Option, as specified in the ERPA
Buffer ERs	The portion of Total ERs that are set aside in the ER Program CF Buffer in accordance with these Guidelines and the terms of the ERPA to cover Uncertainty and Reversal Risks under an ER Program.
Buffer Manager	The Trustee, the IBRD or any other entity or registry acceptable to the Trustee designated to manage the ER Program CF Buffer on behalf of the Carbon Fund.
ER Program	A REDD+ program described in an ER Program document pertinent to the Carbon Fund.
Carbon Fund	The Carbon Fund of the FCPF.
Contract ERs	Means ERs that have been generated and verified under the ER Program within the Accounting Area and have been contracted for under the ERPA, as specified in the ERPA.
Emission Reduction	Means one metric tonne of carbon dioxide equivalent reduced, avoided, removed or sequestered within the Accounting Area under the ER Program below the Reference Level, as measured, reported and Verified in accordance with the Methodological Framework.
ERPA	Emission Reductions Payment Agreement
ER Program Buffer	An ER Program buffer reserve in an ER registry agreed upon between the parties to the ERPA that is managed by the Buffer Manager and serves as a

	mechanism to manage Uncertainty and Reversal Risks during the ERPA term.
ER Program Entity	The party or parties specified as such in the ERPA, who enter(s) into an ERPA with the IBRD as the trustee of the Carbon Fund.
ER Transaction Registry	A registry system used by the ER Program to ensure that ERs are not double-counted or double-claimed. An ER transaction registry may be managed and operated by the ER Program Entity, or managed by a third party on behalf of the ER Program.
Force Majeure Event	An extraordinary and unavoidable event beyond the reasonable control of the Party affected by it, including but not limited to, cyclone, storm, flood, fire and insect plague, except that such an event will not be considered a Force Majeure Event if the occurrence of the event could have been prevented or mitigated by the Party affected by it
Guidelines	These ER Program Buffer Guidelines.
Pooled Reversal Buffer	A component of the ER Program CF Buffer established to help manage the risk of potential large scale Reversals which exceed the amount of ERs set aside in the Reversal Buffer and pooled across all ER Programs for which an ERPA has been signed.
REDD+	The reduction of emissions from deforestation and forest degradation, including the role of forest conservation, sustainable management of forests and enhancement of forest carbon stocks.
Reference Level	A scenario that reasonably represents the volume of emissions from the Accounting Area, expressed in tonnes of carbon dioxide equivalent per year, relative to which ERs are measured, reported and verified in accordance with the Methodological Framework.[3]
Reference Period	Time period for which historical emissions from carbon stocks changes from forests or select REDD+ Activities are estimated to establish the Reference Level.
Reversal	A "reversal" occurs if one or more disturbance event(s) result in the aggregate amount of ERs measured and verified within the Accounting Area for one reporting period being less than the aggregate amount of ERs measured and verified within the Accounting Area for the previous reporting period.
Reversal Buffer	A component of the ER Program CF Buffer established to help manage Reversal Risks for each ER Program separately.

[3] See Section 3.3 of the Methodological Framework for definitions and guidance related to the Reference Level.

Reversal Risk	The risk associated with any physical disturbance within the Accounting Area that may result in a Reversal.
Total ERs	The total quantity of ERs in the Accounting Area that occur during a reporting period, as determined by subtracting total reported and verified emissions and removals for the reporting period from the Reference Level emissions for the reporting period.
Trustee	The International Bank for Reconstruction and Development, acting as trustee of the Carbon Fund.
Uncertainty	The level of statistical uncertainty related to the estimation of ERs to be generated during the ERPA term under the ER Program which account for, among others, errors related to Reference Level estimation and ER measurements.
Uncertainty Buffer	A component of the ER Program CF Buffer established to help manage quantification Uncertainty risk for each ER Program separately.