



**Guidelines on the application of the methodological
framework Number 2**

**On technical corrections to GHG emissions and removals
reported in the reference period**

Version 2
November 2020

Guideline on the application of the Methodological Framework Number 2

On technical corrections to GHG emissions and removals reported in the reference period

In line with the UNFCCC guidance, methodological consistency between the methods and data used to estimate GHG emissions and removals in the reference period and the GHG emissions and removals in the reporting period is necessary to ensure that the difference between the two is attributable to changes in practice, as opposed to changes in methodology. CFPs recognize that limited improvements to measurement and monitoring systems can be made, and that doing so will require technical corrections to ensure consistency.

With respect to Criteria 7, 8 and 14 of the Methodological Framework, the Carbon Fund Participants clarify the following:

1. Technical corrections to the methods and data used to establish Reference Levels are required before validation and first verification provided they comply with the requirements set below;

Requirements:

2. Technical corrections shall not relate to any change to policy and design decisions affecting the Reference Level, including, carbon pools and gases, GHG sources, reference period, forest definition, REDD+ activities, Accounting Areas, identified forest types and definitions, definitions of REDD+ activities (deforestation, degradation). Any technical correction that is determined not to be consistent with this Guideline would be treated as described in paragraph 7 below.
3. Technical corrections shall include one or more items of the following positive list:

Technical correction item	Description
1. Improvement of emission factors	<p>Acceptable technical corrections include:</p> <ol style="list-style-type: none"> a. Replacement of emission or removal factors by others with improved accuracy based on a new National Forest Inventory or terrestrial inventory or new national/local allometric models. b. Replacement of emission or removal factors by others with higher precision and at least equal accuracy by either collecting data on additional sample plots, or applying an additional stratification or conducting a representative inventory that has higher precision.
2. Improvement to activity data	<p>Acceptable technical corrections include:</p> <ol style="list-style-type: none"> a. Improvements to the statistical design for estimation of activity data. This may be applied, for instance, when the precision of activity data is too low (e.g. >30% at 95% confidence level) to enable a precise estimation of Emission Reductions. These are: <ol style="list-style-type: none"> i. Increase the sampling intensity while maintaining the same sampling methodology as originally proposed; ii. Improve stratification, post-stratify, employ methods to reduce variance/improve precision of post-stratification estimates, or improve the accuracy of the stratification map through more accurate processing methods (e.g. using dense time series of satellite data, using satellite data with a higher spatial resolution,

	<p>use-more accurate classification algorithms, using multiple sensors);</p> <p>iii. Use more robust statistical estimator, including the replacement of map-based estimates by sample-based estimates using unbiased estimators, or replace sample based estimates by more accurate/precise model based estimates.</p>
	<p>b. Corrections to activity data resulting from the use of reference data of higher accuracy and/or precision. These are:</p> <p>i. Use of imagery that is of higher spatial and temporal resolution (e.g. very high-resolution imagery or satellite data) than the one used at the time of submission of the ER-PD (i.e. a country may not have been aware of it, could not afford to use it, or did not have the capacity to use it, newly available high resolution satellite data is made available).</p> <p>ii. Improvements to quality assurance/quality control procedures used to collect the reference data (e.g. resampling of visual interpretations, use of an increased number of repeated interpreters, use of written SOPs and robust training procedures);</p> <p>iii. Improvement to the labelling protocol by implementing land cover transition rules that enable the tracking of lands and reduce the risk of “double detection”¹ of land cover transitions.</p>
3. Corrections of material ² errors, omissions and misstatements	Corrections of material errors, omissions and misstatements identified in assumptions, data or calculations used to estimate the historical GHG emissions and removals reported in the reference period. Acceptable technical corrections include the correction of mistakes in calculations, transfer or transcript errors of data, or wrong application of IPCC default values.
4. Corrections required or authorized by Carbon Fund Participants	Technical corrections required or authorized by Carbon Fund Participants as indicated in the Chair Summary of the CF Meeting when the Final ER-PD was submitted or as indicated in the ERPA as a covenant or as recorded through other means.

4. Technical corrections presented under paragraph 3, subparagraphs 1 and 2 a) shall be consistent with the MF and the IPCC guidance and guidelines and other good practice guidance (e.g. GFOI MGD) as assessed during Validation. The updated estimates and related estimation methods must be assessed by recognized independent technical experts (e.g. assessed by an independent panel of UNFCCC ROE experts or GFOI experts, authors of relevant IPCC chapters or relevant chapters of the GFOI MGD) prior to the provision of detailed summary to the FMT (c.f. para 7)
5. Technical corrections are only allowed if this does not compromise the consistency of GHG emissions and removals estimates between the Reference Period and monitoring periods³, i.e.

¹ This occurs for instance when a unit of land transits from forest to non-forest, and then back to forest and then non-forest, there is a risk that deforestation is counted twice in the period of analysis. This can be addressed by enabling the interpreter to look at the time series).

² [The materiality level is defined in the Validation and Verification Guidelines.](#)

³ Indicator 14.1 stipulates that 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

time series consistency shall be ensured for the reference period and all Reporting Periods⁴.

Process:

6. Technical corrections shall be transparently requested, presented and assessed in accordance with the following steps:
7. If the REDD Country is intending to make revisions to the reference level that do not comply with the positive list of Paragraph 3 above, it shall notify to the FMT as soon as possible so that the propose revision is discussed with CFPs either virtually or during a subsequent Carbon Fund meeting, who will decide on whether the revision may be applied. In case the revision is not accepted by CFPs, the REDD Country Participant will not be allowed to apply it. If the revision is accepted by CFPs, this may be considered as a technical correction and the country may present them in the MR for Validation and Verification by the VVB.

8. Notification and provision of detailed summary of REDD Country Participant to FMT:

- a. The REDD Country Participant provides to FMT a complete description of the revised Reference Level as part of Annex 4 of the Monitoring Report;
 - b. The FMT assesses as part of the completeness check the conformity of the proposed revisions are in line with the positive list indicated in Paragraph 3 above.
 - c. If the FMT finds that the proposed revisions are in line with Paragraph 3 above, the proposed revisions may be considered technical corrections and the REDD Country may present them in the Monitoring Report for Validation by the Validation and Verification Body.
9. If the FMT finds that the proposed revisions are not in line with Paragraph 3 above, process specified in Paragraph 7 shall be followed.

10. Assessment by Validation and Verification Body:

- a. The Validation and Verification Body (VVB) responsible for validation and verification assesses the technical correction together with the estimates of the reporting period against the FCPF Methodological Framework, the positive list contained in paragraph 3 of these Guidelines and any guidance provided by the CFPs and reports the assessment as part of the Validation report;
- b. If the VVB finds no technical issues with the applied technical correction, and the correction is consistent with the guidance provided in this note and the FCPF Methodological Framework, the VVB will issue a positive Validation opinion as per the Validation and Verification Guidelines (VVG).
- c. The VVB will verify the emission reductions for the first monitoring period and the associated uncertainty, considering the technical correction;
- d. If the VVB finds the technical corrections are not consistent with the guidance provided in this note and the FCPF Methodological Framework, these will be reported back to the CFPs and discussed either virtually or during a subsequent Carbon Fund meeting. The validation and verification will only be concluded once the issues have been closed out to the satisfaction of the CFPs and the corrected reference level accepted for use in the ER-Program. In case the corrected reference level is not accepted by CFPs, the REDD Country Participant will not be allowed to apply the technical correction.

⁴ As defined in the General Conditions Applicable to ERPA for FCPF Emission Reductions Programs

- e. The REDD Country shall apply technical corrections as defined in paragraph 3 above during the Validation process in the following cases:
 - i. If the VVB or the REDD Country Participant identifies that the Reference Level contains material errors, omissions and misstatements.
 - ii. If the VVB or REDD Country Participant identifies that due to improvements to the FMS, which is now of higher accuracy and/or precision than the RL, the Reference Level is no longer consistent with the FMS estimates and this could result on an overestimation of ERs
11. CFPs request the FMT to update the processing guidelines and ER Monitoring Template to reflect these changes.

Document history

Version	Date	Notes
Version 1	November, 2018	Initial version approved by Carbon Fund Participants during a three-week non-objection period.
Version 2	November, 2020	Second version approved by Carbon Fund Participants during a three-week non-objection period including the following modifications: <ol style="list-style-type: none">1. Additional types of changes have been included in the positive list, namely Corrections of material errors, omissions and misstatements, corrections requested by Carbon Fund Participants and the improvement of the uncertainty of activity data by improving the labelling protocol.2. The prior notification by the REDD Country has been removed.3. The provision of the detailed description shall be provided at the time of presenting the MR.4. Additional guidelines for changes not included in the positive list has been provided.