

## Guidance for Meeting the Requirements of TREES 2.0 for Removals Crediting

### **Introduction**

The REDD+ Environmental Excellence Standard (TREES) 2.0 includes an approach for quantifying Removals as one of its three crediting approaches. Participants must demonstrate conformance with all the requirements in [TREES](#), including those specific to removals accounting covered mainly in Sections 3, 4, and 5. These requirements are also summarized in the [Removals Primer](#).

This document aims to provide practical guidance for Participants, technical assistance providers, and Validation and Verification Bodies on the requirements.

### **Eligibility**

- 1) Removals are only eligible under TREES 2.0 when they occur on areas moving from non-forest to forest. Both natural restoration and commercial activities are eligible if all other requirements are met. (Section 3.2)

*Guidance: Removals on degraded lands that still meet the definition of forest and removals associated with the growth of intact forests are not eligible. Commercial forests must eventually meet the definition of forest used by the Participant to be eligible.*

- 2) Participants must demonstrate that emissions from deforestation and degradation have been reduced below the TREES Crediting Level during the same year to use the removals crediting approach. (Section 5.3)

*Guidance: This is to ensure that there is no incentive to deforest and then reforest. It is evaluated on an annual basis. This means that a Participant may be eligible to use the Removals Crediting Approach in some years of the crediting period, but not in others.*

- 3) All areas included in removals accounting must have been non-forest for a period of 5 years prior to the start of the removal activities. (Section 5.3)

*Guidance: This is also designed to prevent deforestation and immediate reforestation. Participants will be required to show area-based evidence for all removals areas included in the accounting area to demonstrate conformance with this requirement. Evidence could include a georeferenced file or other equivalent documentation.*

- 4) All areas included in removals accounting must have been forest prior to being non-forest. (Section 12.5.5, Safeguard Theme 5.1)

*Guidance: This ensures that Participants are not converting other ecosystems to forests to claim removals credits. Like the previous requirement, some form of area-based evidence will be required to demonstrate conformance for each removals area being claimed.*

- 5) Participants must demonstrate that the included removals are connected to the REDD+ activities. (Section 5.3)

*Guidance: Removals not linked to the REDD+ activities are not eligible for crediting. For each area included in the removals accounting, Participants must provide evidence that:*

- 1. There was intent to conduct passive or active natural restoration. This could include restoration plans, decrees, delineations, agreements or other forms of evidence. Areas of natural restoration with no prior intent demonstrated are not eligible for crediting.*
- 2. A government plan or program linked to the REDD+ program incentivized the commercial forests. This could include livelihood programs, green fiscal policies or programs, restoration plans or others. Areas of commercial forests that occurred outside of any REDD+ program activity are not eligible to be included in the reference period or crediting period.*

### **Removals Activity Data**

As noted, area-based data must be available to use the Removals Crediting Approach. TREES 2.0 advises Participants to stratify these areas to apply different approaches for crediting. The minimum recommendation is to differentiate between the following:

- Natural Forest Restoration (tree planting or natural regeneration of native species with the intention of restoring natural forest cover, without a commercial purpose)
- Commercial Forest (any homogeneous tree planting or forest regeneration with the purpose of commercial harvests)

If these are **not** distinguishable, then all removals areas must follow the commercial forest crediting approach.

If Participants can demonstrate the difference in areas between commercial forest plantations and natural forest restoration, then different credit calculations are permitted.

Areas eligible for crediting must be recorded and maintained in an 'ongoing removals stratum' annually to estimate the additional annual total removals for each year of the crediting period.

*Guidance:*

*Annual data should be maintained for all removals areas. Please note that removals are not cumulative across the crediting period. They must be evaluated and claimed for each specific year of the crediting period.*

*In each year, an Initial Removals stratum should be defined including all eligible areas that began restoration or planting in that year, separated (if possible) between commercial forest and natural forest. In the subsequent year, this initial removals stratum transitions to an ongoing removals stratum (ORS) for the year; the ORS should include all areas being claimed for removals crediting.*

*The ORS for each year should continue to be monitored as a separate stratum to ensure that removals can be properly accounted for in future years. If deforestation or degradation were to occur in these areas, then this will enable the resulting emissions to be based on the removal factors used for that area. Please see guidance below for additional information.*

**Establishing the TREES Crediting Level for Removals (Section 5.3)**

If a Participant is unable to spatially delineate commercial forests from areas of natural restoration, then the commercial forest approach must be used for all removals areas.

1) Natural Forest Restoration

All new areas of natural forest restoration reported during the crediting period are eligible for crediting and a Crediting Level of zero may be applied. Removals can also be claimed for incremental growth that occurs during each year of the crediting period in all areas of natural forest whose restoration began up to ten (10) years prior to the start of the first crediting period. Any loss of these areas must be reported as deforestation or degradation emissions in the calendar year of the loss.

The source of activity data must be consistent between the historical data and the crediting period to ensure consistent monitoring of the ongoing removals stratum.

*Guidance:*

*Annual data is required for the historical data and the crediting period. Data sources for both reference period and crediting period can be derived from remote sensing and/or verifiable recorded statistics and must be area based. If data is not collected annually, then interpolation may be used in line with the requirements of TREES, and the interpolation process must be transparently documented and explained.*

*For more details on the calculations, please refer to [TREES](#) or the [Removals Primer](#).*

*Note that the requirement to demonstrate intent to restore and that the area was not forest for at least five years prior to the activity beginning applies to natural restoration areas. For*

*example, if a Participant is including natural restoration areas that began to be restored in 2015, then the Participant must show evidence from 2015 of the intent to restore the lands as well as evidence that the area was not forest between 2010-2014. If the evidence is not available, then the area may not be included.*

## 2) Commercial Forest

The crediting level for commercial forests is calculated by taking the average of the annual eligible area of conversion of non-forest to forest during the 5 calendar-year historical period (TREES reference period) that precedes the crediting period. During the crediting period, only qualifying new converted (planted) areas each year that are greater than the crediting level area are eligible for crediting.

Areas eligible for crediting in the crediting period must be recorded and maintained in an ‘ongoing removals stratum’ annually to estimate the additional annual total removals for each year of the crediting period. Any loss of commercial forest areas that are being claimed for crediting must be reported as deforestation or degradation emissions in the calendar year of the loss.

The source of activity data must be consistent between the reference period and the crediting period to ensure consistent monitoring of the ongoing removals stratum.

*Guidance:*

*Annual data is required for the reference period and the crediting period.*

*Participants are not required to have qualifying converted (planted) areas above the crediting level for each year of the crediting period. In a year when the total amount of qualifying new converted (planted) areas is below the crediting level, the Participant will simply not receive credits for new areas planted in that year. The Participant can still claim removals credits from incremental growth in that year in the ongoing removals stratum.*

*Data sources for both reference period and crediting period can be derived from remote sensing and/or verifiable recorded statistics and must be area based. If data is not collected annually, then interpolation may be used in line with the requirements of TREES, and the interpolation process must be transparently documented and explained.*

*For more details on the calculations, please refer to [TREES](#) or the [Removals Primer](#).*

## **Removal Factors**

Removal factors in TREES 2.0 are GHG removals per unit of activity per year since the start of the reforestation / forest restoration activity. Removal factors must be net of land cover prior to planting / restoration and must appropriately consider tree mortality and/or harvests that may occur. All

methods used for determining removal factors need to be justified in the TREES Registration Document and will be validated and verified. Removal factors are required to be re-evaluated every 5 years. (Section 4.1.3)

Like emission factors, removal factors where the land use includes cyclical systems (e.g. timber harvests) should consider the long-term average carbon stock of one full rotation. (Section 4.1.2)

*Guidance:*

*A Participant may use one or several removal factors in its calculations to more accurately account for the removals. If a Participant wishes to use multiple removal factors, it must clearly describe which removal factors are associated with which removal areas by providing a stratification map as well as a justification for why the selected removal factor is appropriate.*

*Data sources for removal factors can be varied: plot measurements and inventories, peer-reviewed literature, models, and others. IPCC Tier 1 default factors can be used if Participants can demonstrate that the values are conservative. Removal factors may also be sourced from project developers (private sector, community, or others) who have done specific analyses on their project areas.*

*If removal factors are derived from existing ground-plot measurements and jurisdictional forest inventory, then Participants must present Standard Operating Procedures (SOPs) for measurements and calculations, training procedures, and QA/QC procedures for all measured data. If the work was conducted prior to the Participant joining ART, then written SOPs, trainings, and QA/QC procedures are not required. However, the Participant will need to provide evidence regarding the process and personnel used to provide evidence that the work was done in accordance with best practice.*

*Justification and information on the development of removal factors used by project developers must also be provided. It is not sufficient to cite verification under another crediting program as the justification for use.*

*While removal factors must be evaluated every five years, Participants may not need to revise them each time if a Participant can demonstrate that the factors are still appropriate.*

*Cyclical systems are those that experience a prolonged (i.e. multi-year) period of growth followed by a harvest event (e.g. commercial plantations). The carbon flux of these systems consists of emissions from clearing pre-plantation vegetation, removals during the growth period, followed by emissions at harvest. One full rotation may span 20 years or more and includes carbon stock for non-forest years as well as stock in the first year of planting through to mature stock. Over successive cycles, these systems maintain a steady state impact on the atmosphere equivalent to the long-term average post-emission carbon stock of one full rotation. Therefore, cyclical systems can claim removals up to the average carbon stock value, at which point additional removals credits will not be issued and the area should be monitored as part of the general forest monitoring*

*for deforestation and degradation events. Participants should explain their approach for claiming removals from cyclical systems, which could include dividing the average carbon stock evenly over one full rotation, using a growth curve to claim incremental growth until the average carbon stock value is reached, or other approaches.*

### **Summary**

To demonstrate that these requirements are met, the Participant must provide the VVB with evidence demonstrating conformance with each point. It is essential for the Participant to include details about each step of the data collection process in the TRD and TMR and to have clear, traceable workbooks and data flows. Annual area-based data is required to track the ongoing removals stratum during the crediting period and the reference period. Please visit the ART website for the latest accounting summary table that must be submitted with the final TMR.