

## **OBSERVATIONS IN RELATION TO CATEGORY ASSESSMENT**

### **JURISDICTIONAL REDD+ -**

### **HIGH FOREST COVER/ LOW DEFORESTATION (HFLD) CREDITING**

### **APRIL 2026**

#### **1. Purpose of these observations**

The Governing Board (the Board) of the Integrity Council for the Voluntary Carbon Market (ICVCM), when considering the assessment of methodologies related to activities that Reduce Emissions from Deforestation and Forest Degradation in developing countries (REDD+<sup>1</sup>) identified that it would be beneficial to make available their observations for the purpose of supporting the future development of methodologies in this Category.

These observations are non-binding and do not impact or form any part of the Assessment Framework, Assessment Procedure, or any Decision (as defined under the Assessment Framework) and are published by the ICVCM for the purpose of information only.

The ICVCM may, from time to time, publish other observations for other Categories where it considers this may be useful for CCP-Eligible Programs and other stakeholders, and may update and revise its observations from time to time based on further assessment processes or information. Observations are not an exhaustive set of views of the Governing Board, and not all aspects addressed in assessment processes are included. No reliance may be placed on observations, as they are for the purpose of information only, and observations published are without prejudice to other ongoing assessments.

The Governing Board would like to express its gratitude to the experts and other stakeholders engaged in the assessment process who provided input to the ICVCM regarding this Category.

#### **2. Observations relating to REDD+ methodologies**

The Governing Board's observations regarding the assessment of REDD+ methodologies against the ICVCM Assessment Framework and its Core Carbon Principles generally relate to robust quantification, additionality and permanence.

The methodology within this Category to which these observations relate is The REDD+ Environmental Excellence Standard (TREES) v2.0 - emissions reductions generated using the HFLD Crediting Level applied under ART (referred to as TREES HFLD v2.0 in this document).

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<sup>1</sup> The international community established the 'REDD+' framework to protect forests as part of the [Paris Agreement](#). 'REDD' stands for 'Reducing emissions from deforestation and forest degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks.

## 2.1. Category Details

### HFLD

High Forest Cover, Low Deforestation (HFLD) is a designation<sup>2</sup> that applies to jurisdictions (e.g., countries, regional states, provinces) that have large areas of intact forests and historically low rates of deforestation. The preservation of forests in these regions is considered a vital step in mitigating climate change and requires financial resources at scale to be successful; REDD+ mitigation activities in carbon markets have emerged as a potential source of this funding.

HFLD REDD+ crediting in carbon markets typically relies on an adjustment to measured baseline greenhouse gas (GHG) emissions to account for changes in circumstances that may underestimate future rates of deforestation or forest degradation. Recent peer-reviewed research<sup>3</sup> concluded that “most contemporary HFLDs are expected to undergo higher deforestation in the period from 2020 to 2038 than their historical baselines” and “upward-adjusted crediting levels are very conservative for those HFLDs facing higher risks and also underestimate the potential for rising deforestation in the future”.

The HFLD adjustment in TREES HFLD v2.0 allows crediting against a very small percentage of the standing carbon stock (<0.05%<sup>4</sup>) in addition to any measured GHG reductions from avoiding deforestation. Effectively, the crediting approach assumes that the calculated standing carbon stock (above-ground and below-ground tree biomass only) is at risk of additional deforestation each year and is avoided by the mitigation activities that the Participant<sup>5</sup> implements.

The application of adjusted crediting has been a source of contention in terms of both additionality and conservativeness of the projected business as usual scenario. Some experts, however, are supportive of the crediting approach on the basis that many HFLDs face imminent threats of higher deforestation. These varying viewpoints were recently noted<sup>6</sup> by the Technical Advisory Body (TAB), who make recommendations on decisions for Eligible Emission Units for the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) offsetting scheme.

In practice, as is common in REDD+-related mitigation activities, additionality and baselines are practically indistinguishable within the methodology so are covered together in the observations below.

## 2.2. Additionality and baselines under TREES HFLD v2.0

### Alternate but equivalent additionality

Unlike typical carbon projects, which are generally small in physical scale and managed by private entities, jurisdictional approaches cover large geographic areas such as entire countries or states and are government-led. The Assessment Framework therefore provides special

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<sup>2</sup> There is no standardised definition of an HFLD

<sup>3</sup> [Teo et al., 2024](#)

<sup>4</sup> The percentage is less than 0.05% because it is multiplied by the HFLD Score, which is less than one.

<sup>5</sup> The term Participant means the Sovereign Developer of the ART jurisdictional REDD carbon credit program and is used for this purpose for the remainder of this document. Where the term jurisdiction is used, this refers to countries, regional states, provinces that are not involved in the ART carbon credit program.

<sup>6</sup> Clarifications of TAB's Criteria Interpretations Contained in TAB Reports, November [2025](#)

consideration to determining additionality in respect of Jurisdictional REDD+ (JREDD+) mitigation activities, given these unique characteristics<sup>7</sup>.

TREES HFLD v2.0 is a jurisdictional REDD+ methodology and, in line with Criterion 8.9 (b), ART seeks to take an alternative but equivalent approach to demonstrate compliance with the detailed provisions listed in Criterion 8.9 (a) Additionality for Jurisdictional REDD+ Programs<sup>8</sup>. TREES HFLD v2.0 relies on a performance-based approach that works by comparing annual emissions measured during the crediting period (i.e., post implementation) with a historical baseline averaged over the five years immediately preceding the implementation start date.

The use of historical averages to set the baseline is designed to capture the impacts of laws, regulations, fiscal policies, commodity prices, and other factors that may vary naturally over time such as fires or drought. Unlike a typical carbon project, this complex array of often interdependent factors is all, in principle, within the control of a jurisdiction. As such, measuring the average emissions during this period captures the typical *performance* of the jurisdiction before implementation begins. Thus, whenever a jurisdiction's post-implementation GHG emissions are lower than the long-term historical average, the difference is attributable to the mitigation actions carried out by the jurisdiction, and those GHG emission reductions are, therefore, additional. This general approach has previously received CCP-Approval for the non-HFLD crediting level of TREES methodology<sup>9</sup>.

As mentioned in 2.1 above, in TREES HFLD v2.0, the historical baseline emissions are adjusted upwards (i.e., increased). This is achieved by the application of a formula derived from the specific rate of deforestation and percentage forest cover within the jurisdiction.

### **Historical averages and modelling the future**

As per the conclusion of independent research (see 2.1 above), the historical average of GHG emissions in HFLD jurisdictions may not be an accurate predictor of what will happen in the future. For these jurisdictions, low deforestation rates should not, in principle, be assumed as the business-as-usual case. As economic activity continues to expand and demand for agricultural and mineral commodities grow, forests may face both new and increased deforestation drivers that would require new and enhanced activities to mitigate. Therefore, a key question is whether the crediting HFLD jurisdictions will, in fact, face these new and increased drivers.

During the assessment process, ICVCM learned that most Participants seeking registration under ART have previously received funding to progress REDD+ readiness and implementation (examples of such funding include the UN REDD Programme – which includes various sources of finance<sup>10</sup>; the GCF REDD+ results-based payments<sup>11</sup> and the Forest Carbon Partnership Facility<sup>12</sup>). Such funding may be actively reducing rates of deforestation and GHG emissions compared to business as usual and may be time limited in nature. Under such a scenario, GHG emissions would reasonably be expected to increase if the funding were to stop.

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<sup>7</sup> Please refer to ICVCM Assessment Framework Section 8.9

<sup>8</sup> Please refer to ICVCM Assessment Framework Section 8.9 (a)

<sup>9</sup> Please refer to the TREES [Decision](#) and REDD+ Part I Board [Observations](#)

<sup>10</sup> United Nations Reducing Emissions from Deforestation and Forest Degradation in Developing Countries ([UN-REDD Programme](#))

<sup>11</sup> Green Climate Fund REDD+ results-based payments. More information at: [REDD+ | Green Climate Fund](#)

<sup>12</sup> More information at: [Forest Carbon Partnership Facility](#)

Based on this understanding, the Governing Board’s decision includes a remedial action that requires HFLD Participants to document and justify with independent evidence specific to the HFLD accounting area why GHG emissions are likely to increase and thus a threat of imminent deforestation exists. In the Governing Board’s Decision, ART is also required to introduce requirements for VVBs to verify that independent evidence confirms that the expected increased emissions are likely to be comparable (i.e., similar) to the adjusted emissions derived from the Participant’s HFLD Score and carbon stocks.

The Governing Board notes that each HFLD jurisdiction has its own unique and complex set of drivers of current and future deforestation and recognises that further work, including global models, may provide more accurate individual quantitative assessments of threat. The Governing Board notes that these approaches may be valid examples of independent evidence or even the basis for future methodological work, but recognises that models have elements of uncertainty and may not be able to forecast extreme events.

### **Baseline input data**

TREES HFLD v2.0 requires that “Participants must demonstrate that all carbon estimation and quantification approaches conform with best practices for all matters”; it is to be noted that the methodology does not specify the carbon quantification approach or sampling method or methods to be used. Participants are required to provide the details of each method, including an explanation of why the method was selected for use. VVBs are required to assess whether quantification methodologies and associated measurements or monitoring are of acceptable accuracy and reliability, conservative and whether they have been appropriately applied. The techniques a VVB uses to audit a mitigation activity (e.g., cross checking, tracing, analytical testing, etc.) are case-specific and, therefore, left to their professional judgment.

During the assessment process, ICVCM became aware of a public evidential report relating to a HFLD country<sup>13</sup> that indicates that current rules on validation and verification are likely to not be adequate to avoid potential overestimation of GHG emission reductions. A key input to carbon calculations is the carbon in biomass stocks, which are typically measured in samples across a large and heterogenous accounting area (for sub-national areas, the minimum eligible area is 2.5M hectares — approximately the same size as Rwanda). Cross-checking measured carbon stocks and sampling approaches against credible sources can be a highly effective auditing technique. Accordingly, the Governing Board determined that, for TREES HFLD v2.0, VVBs must perform such cross-checks and make the results publicly available to enhance transparency and ensure compliance with the Assessment Framework requirements related to robust quantification. The Governing Board notes this may be a relevant consideration for other TREES crediting levels and will consider this further as needed.

### **The ART HFLD Penalty Deduction approach**

If annual emissions exceed the five-year historical average in any year of the crediting period, HFLD Participants must apply a percentage deduction to the total credits generated in that year (called the Penalty Deduction in TREES HFLD v2.0). This Penalty Deduction applies a deduction rate that is generally proportional to the percentage by which the annual emissions exceed the historical average. This deduction, however, is only applied when annual emissions are 15 per

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<sup>13</sup> [FCCC/TAR/2025/GUY](https://www.fccc.org/tar/2025/guy)

cent more than the annual average, or higher. This raises the possibility that a HFLD Participant may continue to receive a maximum volume of adjusted credits even when measured forest GHG emissions are generally increasing, provided that the increase is less than 15 per cent. ICVCM considered this issue during the assessment process and determined that although possible, a persistent increase of less than 15 per cent would be unlikely to occur in practice. The ICVCM also considered other percentage values at which the HFLD Penalty should come into force and determined that sufficient evidence does not exist for a more accurate threshold and applying a penalty deduction at values above zero would be impractical, given the tendency for forest emissions to naturally fluctuate. The Governing Board will be attentive to this situation during ICVCM's ongoing oversight and assurance.

### **2.3. Documentation and Oversight**

#### **Clarity in documentation**

TREES HFLD v2.0 rules require that each HFLD Participant shall submit a REDD+ implementation plan and TREES Monitoring Report that outlines the new and ongoing programs or activities planned to achieve the GHG emission reductions and removals. As noted above, HFLD Participants seeking registration under ART are likely to have previously received funding to progress REDD+ readiness and implementation. Perhaps reflecting the extensive documentation that may already be in place from such mechanisms, the structure of the TREES Registration Document (TRD) template allows flexibility in how it is completed, which can hinder transparency and stakeholder scrutiny. Transparency is vital for confidence in the carbon market and especially for a novel crediting mechanism that relies on both adjusted emissions (see 2.1 above) and jurisdictional actions taken at scale. Other market stakeholders have also noted<sup>14</sup> that improved clarity in documentation in preparation for audit processes is required. The Governing Board, therefore, decided that a concise summary of actions and activities and how they address the key drivers of deforestation and degradation was a necessary remedial action to align with the requirements of the Assessment Framework.

#### **Observations on Program oversight**

The ART project cycle<sup>15</sup> refers to ART's close oversight of VVB processes and production of documentation. ICVCM notes that the line between oversight and influence is nuanced and that overly close oversight may lead to a lack, or perceived lack, of independence of VVBs. ICVCM notes that observing the audit process is generally a beneficial process but recommends that where ART rectify auditing and mistakes in documentation, information on such rectification by ART should be made publicly available, for the benefit of other users of its standard.

### **2.4. Leakage**

Leakage refers to GHG emissions that are caused by the implementation of a mitigation activity but occur outside its boundary. TREES HFLD v2.0 fully accounts for leakage when operating at the national level. At the sub-national level, TREES HFLD v2.0 applies a leakage deduction rate based on the percentage of total national area within the project boundary; it is noted that sub-

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<sup>14</sup> <https://www.un-redd.org/multi-media-stories/initial-lessons-and-recommendations-art-trees-validation-and-verification>

<sup>15</sup> Please refer to Section 2.1 of ART TREES version 2.0

national accounting areas are only permitted as an interim measure until Dec 31, 2030, regardless of the number of years left in the crediting period<sup>16</sup>.

The ICVCM notes that improved leakage estimates at a sub-national level are important for scaling up the market and recommends that this issue is included in the ICVCM's CIWP on jurisdictional crediting approaches and its results considered in the context of evolutions to the Assessment Framework.

## **2.5. Permanence under HFLD jurisdictional approaches**

TREES HFLD v2.0 does not require monitoring of reversals that may occur after the Participant has ceased to participate under TREES. Instead, the TREES methodology provides that if a Participant leaves, all the carbon credits they contributed to the buffer are cancelled (and not returned or otherwise used)<sup>17</sup>, an approach recognised in the Assessment Framework. A consideration raised, including by some experts in the Expert Panel, was whether it is possible to know (in advance) whether the percentage placed in a buffer pool will be adequate and provide at least an equivalent level of protection as compared to the 40-year minimum requirement of monitoring and compensation for project-based methodologies<sup>18</sup>.

The issue was explored during the assessment of the non-HFLD crediting level of TREES methodology<sup>19</sup>, which determined that, under practical scenarios, the accumulated buffer of credits was sufficient. Further, should the buffer pool ever not be sufficient to cover a reversal, ART's rules and Terms of Use<sup>20</sup> require that the deficit must be replenished by the Participant, including by purchasing other credits.

However, unlike other (non-HFLD) crediting levels in the ART TREES v2.0 methodology, HFLD jurisdictions benefit from an automatic deduction from the maximum rate of buffer pool contribution, which is set at 25%. This means that HFLD jurisdictions are highly likely to make a smaller contribution than an equivalent non-HFLD Participant. The rationale behind the automatic deduction for HFLDs is a historically low interannual variability in forest emissions. However, it may not be reasonable to expect that this would continue if the HFLD is under threat of increased deforestation. A probable increased rate of future deforestation is a fundamental assumption behind the adjusted crediting approach (and a justification of the need to fund mitigation activities). There is, therefore, a likely similar risk that these mitigation activities could fail, or reversals could occur, much like any other REDD+ activity. ICVCM notes, however, that the HFLD mitigation activities (i.e., intact forest protection) may be different than those mitigation activities required to reduce deforestation that has already taken hold and fundamentally there is greater uncertainty about future permanence risks.

Based on this, the Governing Board decided additional risk mitigation was required to meet the requirements of the Assessment Framework. Therefore, the Decision includes a remedial action to remove the automatic deduction for low interannual variability of forest emissions and replace

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<sup>16</sup> <https://www.art-redd.org/wp-content/uploads/2020/02/TREES-v1-Statement-of-Reasons-February-2020.pdf>

<sup>17</sup> See Criterion 9.5 a) 2) and Criterion 9.5 a) 4).

<sup>18</sup> See Criterion 9.3 a) 1) of the Assessment Framework

<sup>19</sup> Please refer to the TREES [Decision](#) and REDD+ Part I Board [Observations](#)

<sup>20</sup> <https://www.artredd.org/wp-content/uploads/2024/05/ART-Registry-Terms-of-Use-May-2024.pdf>

it with an alternative that demonstrates that the contribution to the buffer pool suitably addresses permanence risks. The Decision also includes a condition that monitoring and compensation should be for a minimum twenty years from the start of the crediting period.

Permanence is a complex market challenge with potential for increased ambition. Following the conclusion of its first Continuous Improvement Work Program (CIWP) on this topic<sup>21</sup>, the ICVCM will consider whether to require in evolutions of the Assessment Framework that carbon-crediting programs (i) commit to post-crediting monitoring for the permanence period required under the Assessment Framework, (ii) undertake periodic reassessments of buffer pool contributions to ensure these remain proportionate to the evolving risk profile of the project or jurisdiction and (iii) have provisions for increased transparency and reporting on buffer pool status.

## 2.6. Stakeholder Input

ICVCM has received numerous Stakeholder Inputs<sup>22</sup> on TREES HFLD v2.0. Those who favour approval of the methodology as CCP-Approved generally assert that the crediting approach is conservative and cite various scientific publications in support. Further, some assert that it is a necessary revenue source for countries and regions that have extensive intact forests, some of whom have publicly expressed their concerns<sup>23</sup> that without funding their forests will vanish. The input from stakeholders with opposing views generally asserts that a test to prove an area is under imminent threat is required for an HFLD adjusted baseline to be a credible business-as-usual scenario.

The Governing Board notes a number of stakeholders directly highlighted to the ICVCM that concessions for oil company exploration have been recently granted within HFLD jurisdictions and that companies operating under those concessions have also purchased credits from those territories.<sup>24</sup> The Governing Board notes that the Assessment Framework governs the systems for generation and issuance of high integrity supply of carbon credits and does not extend to the specifics of purchases and financing.

The Governing Board thanks all stakeholders who have supplied input, which was carefully considered during the assessment process and helped form the basis of some of the remedial actions in the Decision. The Governing Board notes that this assessment raised many different perspectives among those involved — and this included dissenting views that did not support the remedial actions included in the Decision.

Taking all this into account, the overall conclusion of the assessment process was that TREES HFLD v2.0 does not currently but may be able to be revised to fulfil the requirements of the Assessment Framework if the remedial actions are addressed satisfactorily and the condition on permanence is met. To address the remedial actions, ART will need to resubmit HFLD v2.0 to the ICVCM for consideration and the revisions made will be reviewed in line with the Assessment

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<sup>21</sup> <https://icvcm.org/continuous-improvement-work-programs/standardised-approaches#permanencereport>

<sup>22</sup> <https://icvcm.org/stakeholder-input/>

<sup>23</sup> Krutu of Paramaribo Joint Declaration on HFLD Climate Finance Mobilization, 2019

<sup>24</sup> <https://investors.hess.com/news-releases/news-release-details/hess-corporation-and-government-guyana-announce-redd-carbon>

Procedure<sup>25</sup>. Only when the Governing Board has issued a second Decision that the remedial actions have been completed satisfactorily can credits issued under this methodology become capable of being identified as CCP-Approved, further subject to the condition noted above. The Governing Board notes that this outcome would be broadly consistent with the viewpoints noted by CORSIA's Technical Advisory Body (TAB) in 2.1 of these Observations.

## **2.7. Environmental and Social Safeguards**

The Governing Board underlines the critical importance of robust environmental and social safeguards in REDD+ mitigation activities. Effective oversight mechanisms are essential to ensure that mitigation activities do not compromise ecological integrity or community well-being. The Assessment Framework requires environmental and social safeguards to be assessed by mitigation activity proponents<sup>26</sup>. Where risks of negative environmental and/or social impacts are identified, commensurate measures must be implemented to minimize and address these risks.

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<sup>25</sup> Please refer to the Assessment Procedure 3.20

<sup>26</sup> Please refer to ICVCM [Assessment Framework](#) Section 7.