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## Public Consultation for Revised HFLD Crediting Level Approach in TREES 2.0

### *Environmental Defense Fund comments*

Environmental Defense Fund (EDF) appreciates the opportunity to provide comments on the proposed updates to the ART TREES HFLD Crediting Level that is newly proposed in Section 5.2 of the Standard. We commend the ART Secretariat and Board for recognizing the importance of providing a large jurisdictional-scale crediting approach for High-Forest, Low-Deforestation (HFLD) regions. The effectiveness of an overall crediting program to drive down global emissions can be enhanced through a careful approach that balances a focus on providing incentives to jurisdictions for rapidly reducing emissions below historical levels, with a well-constrained set of incentives for ensuring large HFLD jurisdictions do not increase emissions. In general, **EDF supports the methodology behind the updated HFLD calculation that provides incentives both for reducing emissions and for maintaining forest carbon stocks**, and would like to offer suggested guidance to ART around potential refinements to ensure these incentives are well-targeted and balanced across jurisdictions.

We begin our comments with a short discussion of the justification for recognizing HFLD credits within the TREES standard, including a set of considerations around addressing additionality concerns associated with the HFLD approach. We follow with suggestions regarding tagging HFLD credits separately from non-HFLD credits. We conclude with a detailed set of methodological and textual recommendations for the proposed revisions to the text of the HFLD crediting mechanism itself. We welcome further discussion on the basis of these suggestions as needed.

## A judicious approach to crediting HFLD jurisdictions is important to improve the effectiveness and equity of a REDD+ crediting program overall

To achieve the goals of the Paris Agreement of limiting the rise in global temperatures to well below 2 degrees, tropical forest loss must be eliminated and reversed within the next decade<sup>1</sup>. It is thus imperative to effectively structure and scale up incentives to reduce forest carbon emissions globally. According to the Krutu of Paramaribo Joint Declaration on HFLD Climate Finance Mobilization (2019)<sup>2</sup> 24% of the world's forests (close to a billion hectares) are located in HFLD regions, and they define HFLD areas more conservatively (<0.22% deforestation rate) than ART. An effective and equitable global REDD+ incentive-system for reducing deforestation should reward all relevant jurisdictions and actors, including both historical emitters and historical protectors of carbon stock<sup>3</sup>, if we are to eliminate forest loss in areas where it is already occurring as well as avoid future increases in areas of historically low loss as needed to keep global temperature rise to well below 2°C.

It is commendable that ART TREES has opted to not only include HFLD incentives, but to do so using a conservative approach at a jurisdictional-level that rewards the preservation of carbon stocks directly. Deforestation is projected to increase all over the tropics<sup>4</sup>, raising an urgent need to preserve forest stocks. Modeling calibrated with historical patterns of deforestation projects deforestation to rise in Latin America and Africa and to stay roughly constant in Asia over the next 15 years in the absence of economic incentives for forest conservation<sup>5</sup>. Even areas where deforestation has been historically low are poised to be under threat in the future if incentives for sustainable development do not emerge.<sup>6</sup> For example, the agricultural frontier in Brazil has historically advanced into areas of dense forest (Amazon) and the Cerrado. Without the proper financial incentives, there is no guarantee that forests in HFLD areas will remain effectively protected in the long run. Halting tropical deforestation is a time-limited climate mitigation option: if not exercised soon, it may be foreclosed. Scientists predict that the Amazon is approaching a “tipping point” driven by deforestation and climate change, beyond which much of the forest ecosystem would degrade to scrub savanna, with potentially huge losses in carbon storage<sup>7</sup>.

Moreover, there is a potential risk that deforestation pressure will shift to HFLD areas as high-deforestation regions engage in efforts to reduce their local rates of forest loss. This effect is

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<sup>1</sup> IPCC. (2019). Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. <https://www.ipcc.ch/srccl/cite-report/>

<sup>2</sup> [https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201903220903---Krutu%20of%20Paramaribo\\_13-02-19.pdf](https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201903220903---Krutu%20of%20Paramaribo_13-02-19.pdf)

<sup>3</sup> Moutinho, P. & Schwartzman, S. (2005). Tropical Deforestation and Climate Change. [https://www.researchgate.net/publication/253238011\\_Tropical\\_Deforestation\\_and\\_Climate\\_Change](https://www.researchgate.net/publication/253238011_Tropical_Deforestation_and_Climate_Change)

<sup>4</sup> Busch, J. & Engelmann, J. (2017). Cost-effectiveness of reducing emissions from tropical deforestation, 2016–2050. *Environmental Research Letters*. 13, 015001. <https://doi.org/10.1088/1748-9326/aa907c>

<sup>5</sup> *ibid*

<sup>6</sup> Mather, A. & Needle, C. (1998). The Forest Transition: A Theoretical Basis. *Area*. 30(2), 117–124. [www.jstor.org/stable/20003865](http://www.jstor.org/stable/20003865)

<sup>7</sup> Lovejoy, T. & Nobre, C. (2019). Amazon tipping point: Last chance for action. *Science Advances*. 5(12). <https://doi.org/10.1126/sciadv.aba2949>

known as leakage, and if left unaddressed it can erode efforts to control deforestation at a global scale. Studies suggest that creating incentives to maintain carbon stocks in HFLD areas can be an effective solution to reduce the risk of leakage<sup>8</sup>. Such an approach also ensures that areas where Indigenous territories and other actors whose efforts to reduce emissions have been succeeding are rewarded such that incentives are not only provided for those comparatively “bad” performing actors in areas where emissions are high or rising.

Aside from reducing leakage risk, recognition of HFLD credits could also improve jurisdictional participation and effective distribution of benefits to relevant actors. Busch et al. (2009)<sup>9</sup> compared five different FREL designs and concluded that rewarding maintenance of carbon stocks as well as reduction of flows in high deforestation areas results in higher jurisdictional participation and better cost-effectiveness for global REDD+, resulting in greater net reductions at a lower cost per ton across the entire portfolio of participating countries. Furthermore, they conclude that while there are different potential designs of an HFLD approach, the greatest benefit for limiting forest emissions comes from the inclusion, rather than the exclusion, of HFLD crediting as part of the international portfolio of REDD+ strategies. Providing financial incentives to HFLD jurisdictions before they experience a spike in deforestation pressure is thus a crucial, cost effective, and equitable way to protect forests at a global scale over the coming decade.

Crediting emissions reductions relative to projected emissions, rather than historical averages of emissions, raises a range of concerns about the “additionality” of those emissions reductions. This risk is mitigated in the first instance by a jurisdictional approach, such that all forests in a jurisdiction must be accounted for, rather than smaller actors being able to voluntarily self-select into the program. There can be greater confidence that deforestation pressures will rise somewhere within a large region, rather than trying to project threats at any particular location.

Second, an HFLD approach can be made consistent with absolute reductions in emissions below historical levels at global or portfolio-wide level. This is the premise of the “stock-flow” approach originally proposed by Cattaneo (2009<sup>10</sup>, 2010<sup>11</sup>). The approach applies a withholding of credits for a portion of reductions in the “flow” of emissions measured against historical levels and applying the amount of that withholding to reward the “stock” of carbon. The updated HFLD proposal from ART-TREES is not explicitly formulated along these lines but can be considered consistent with this approach in that it provides incentives based on the maintenance of the carbon stock. At the same time, the approach for crediting reductions in the flow of emissions below historic levels through the TREES Crediting Level contains a set of “withholdings” in the form of deductions, notably for leakage in the case of subnational programs. It is reasonable to think of the HFLD programs as serving to mitigate those leakage risks, by incentivizing

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<sup>8</sup> Busch, J., et al. (2009). Comparing climate and cost impacts of reference levels for reducing emissions from deforestation. *Environmental Research Letters*. 4, 044006. <https://doi.org/10.1088/1748-9326/4/4/044006>

<sup>9</sup> *ibid*

<sup>10</sup> Cattaneo, A. (2009). A Revised Stock-Flow Mechanism to Distribute REDD Incentive Payments Across Countries. The Woods Hole Research Center. [http://www.woodwellclimate.org/wp-content/uploads/2015/09/Stock-flow-mechanism\\_post-Poznan5.pdf](http://www.woodwellclimate.org/wp-content/uploads/2015/09/Stock-flow-mechanism_post-Poznan5.pdf)

<sup>11</sup> Cattaneo, A. (2010). Incentives to reduce emissions from deforestation: a stock-flow approach with target reductions. In: Bosetti, V., Lubowski, R. (Eds.), *Deforestation and Climate Change: Reducing Carbon Emissions from Deforestation and Forest Degradation*. Elgar Publications.

maintenance of carbon stocks, as long as an appropriate balance is maintained over time across HFLD to non-HFLD crediting.

The stock-flow approach balances rewards for reductions in historical emissions with incentives for maintaining carbon stocks, leading to a more equitable distribution of funding across forested areas areas facing deforestation pressures<sup>12</sup>. This is also more equitable in terms of offering rewards to “good” forest actors, and is in accordance with the basic principles of the jurisdictional approach, which allocates benefits to numerous groups (including Indigenous Peoples, small and medium landholders, protected areas, among others) who contribute to tropical forest protection. Together, these efforts make large-scale deforestation reductions not only possible but *durable*.

Without an HFLD crediting mechanism in place, not only is the risk of international leakage increased, but equity of payments is also at issue. If credits are generated only based on high historic emissions and subsequent reductions (default TREES credits), then this system would not reward those regions with consistently low deforestation, often home to Indigenous communities, who may have high opportunity costs of not deforesting but still choose to protect standing forest carbon stock. Finally, the ART TREES initiative encompasses REDD+, not just REDD. That “plus” is meant to include the conservation and enhancement of forest carbon stocks, along with the sustainable management of forests, which is exactly what this HFLD crediting methodology encourages.

## Tagging HFLD credits

EDF believes that the goal of HFLD crediting under TREES should be to establish criteria with enough environmental integrity as to be fully fungible at a global scale with non-HFLD TREES credits. As a result, while ART will want to provide transparency on the source of the credits and the details of the underlying programs, we do not recommend specially tagging HFLD credits or treating them separately in the registry. We similarly do not recommend treating credits from reductions differently from removals. While full information should be available for all credits, such differentiation of the units risks creating confusion about the fungibility of such credits, undermining the goal of ART TREES to create fully fungible, highest quality units that can attract greater demand in the marketplace.

It is also imperative to ensure the strong additionality of TREES units. We suggest that ART ensure this through conservative approaches as discussed below, including the incorporation of degradation emissions in the HFLD Score as well as removing the forest cover component from the HFLD Score that is multiplied by the forest carbon stock. We also recommend that ART seek to ensure additionality at a portfolio level by ensuring an appropriate balance over a 5-year crediting period, for example, between credits issued using the TREES Crediting Level based on historical emissions and credits issued under the HFLD approach. It may take longer for

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<sup>12</sup> Cattaneo, A. *et al.* (2010). On international equity in reducing emissions from deforestation. *Environmental Science & Policy*. 13(8), 742-753. <https://doi.org/10.1016/j.envsci.2010.08.009>

high-deforestation jurisdictions to implement the forest sector transformations required to drive deforestation down at scale than it would for HFLD jurisdictions to maintain the status quo. Thus, it may be wise for ART to monitor the balance of the portfolio of credits in the TREES registry over the near term, with the potential to revise the allocation mechanism for HFLD credits in future periods as needed.

A goal should be to ensure a “stock-flow” type approach at the portfolio level, such that the number of credits issued in total does not exceed the historical emissions from all the jurisdictions participating in the ART TREES program as a whole. Under the “stock-flow” approach, for example, there is a withholding of a fraction of credits for reducing historical emissions that is then used to reward maintenance of carbon stocks. Such an approach can be approximated if the number of credits issued for HFLD regions is kept within the range of the deductions for leakage from the jurisdictions being credited for reductions below historical emissions levels. If HFLD credits exceed this volume, it may be a sign that adjustments to the formula are required. A number of other options may be available for evaluating the balance of HFLD and non-HFLD credits, given the conservative approach for crediting reductions below historical levels.

It is also our understanding that ART requires qualifying jurisdictions to select whether they will opt-in to generating HFLD credits under the revised methodology, and if doing so, preclude the ability to generate and sell emissions reductions under the non-HFLD methodology. This may act as a disincentive for jurisdictions that are closer to the edge of HFLD qualification to use the HFLD approach or even from maintaining HFLD status if HFLD credits are tagged separately. One solution could be for jurisdictions to sell the wedge of credits below the HFLD Crediting Level and above the default TREES Crediting Level under the HFLD tag, with ambition achieved in excess of the default TREES Crediting Level sold as non-HFLD credits. This arrangement would preserve HFLD incentives without requiring cusp nations to forgo the flexibility to sell non-HFLD credits. If credits are to be tagged separately, we believe that such flexibility should be allowed.

## Methodological and textual recommendations for the HFLD Crediting Level formula

We support the proposed approach that bases the HFLD Crediting Level on a combination of conservatively projected emissions and a fraction of carbon stock. This is an improvement relative to the prior approach as it provides incentives to protect carbon stocks even in jurisdictions where emissions are low and not trending upwards and avoids potentially perverse incentives for jurisdictions to increase emissions in order to be able to project rising emissions. We also support the added balance of the deductions in the case that emissions are not declining in absolute terms to further strengthen incentives to reduce emissions absolutely.

We would like to offer several suggestions and observations to the text that we believe could strengthen the Standard. Please see our considerations below, expressed as bullet points under the relevant highlighted section of the standard.

## Section 9.2 HIGH FOREST COVER, LOW DEFORESTATION

In order to qualify for the TREES HFLD label and use the optional HFLD Crediting Level approach, national or subnational Participants must demonstrate that they meet the HFLD Score threshold throughout the historical reference period for which data is available. This must be demonstrated at the beginning of each Crediting Period and remains applicable for all five years of the Crediting Period.

Participants whose forest cover is greater than 50% and annual deforestation rate is less than 0.5% during the historical reference period for years in which data is available are eligible to calculate an HFLD Score. The HFLD Score is the sum of the Participant's Forest Cover Score and the Participant's Deforestation Rate Score as exemplified in the illustrative figures below and outlined in the following equations. Participants whose HFLD Score is 0.5 or higher meet the HFLD Score threshold.

- We suggest that the ART Secretariat includes in their Statement of Reasons a justification for the predetermined value of 0.5% of “allowable” deforestation. We recommend ART provide greater rationale for the selection of this maximum threshold, instead of other deforestation rates used to designate HFLD areas.
- There is no explicit limit provided for acceptable forest degradation. We recommend that ART consider including this as an influencing factor into the HFLD definition. Selective logging and forest degradation contribute to emissions (~25% of gross forest emissions<sup>13</sup>), including in Amazon Indigenous territories and protected areas<sup>14</sup>, and land that is degraded by selective logging is up to 400% more likely than non-cleared land to be deforested<sup>15</sup>. This activity does not currently factor into the designation of a HFLD region, though it ought to be a factor. We recommend the “deforestation rate” term should include the rate of forest loss generally, including historic rates of carbon losses from both deforestation and degradation, given that reductions of both can be credited under the current TREES methodology.

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<sup>13</sup> Pearson T., Brown, S., Murray, L., & Sidman, G. (2017). Greenhouse gas emissions from tropical forest degradation: an underestimated source. *Carbon Balance and Management*. 12(3). <https://doi.org/10.1186/s13021-017-0072-2>

<sup>14</sup> Walker, W. *et al.* (2020). The role of forest conversion, degradation, and disturbance in the carbon dynamics of Amazon indigenous territories and protected areas. *PNAS*. 117(6), 3015-3025. <https://doi.org/10.1073/pnas.1913321117>

<sup>15</sup> Asner, G., *et al.* (2006). Condition and fate of logged forests in the Brazilian Amazon. *PNAS*. 103(34), 12947-12950. <https://doi.org/10.1073/pnas.0604093103>

## Equation 9

$$DRS_t = 0.5\% - DR_t$$

WHERE:

$DRS_t$

Deforestation Rate Score in year  $t$

$DR_t$

Deforestation rate in year  $t$ ; %<sup>13</sup>

<sup>13</sup> Deforestation rate is defined as the area of forest lost in year  $t$  divided by the total area of forest present in the first year of the historical reference period.

- Footnote 13 states “Deforestation rate is defined as the area of forest lost in year  $t$  divided by the total area of forest present in the first year of the historical reference period”, which implies that the equation should use a constant denominator of forest area ONLY from the first reference year. However, if forest area declines each year over the five year reference period (which is probable in many instances), then this would underestimate the true annual deforestation rate, by using an inflated denominator from the first year.
- To determine a deforestation rate in year  $t$ , we suggest that forest cover loss in a given year of the reference period should be divided by the forest cover at the beginning of *that year in the reference period, i.e. year  $t$* . This means that the denominator could (and likely will) change every year of the reference period, though it would more accurately reflect that year’s deforestation rate. Reference years have clear implications on the resulting HFLD Score, so the years and methodology that are meant to inform forest cover and deforestation rates should be explicitly stated. We suggest that ART include a calculation with sample data, to ensure that applicants are following a consistent methodology.

In order to qualify for the TREES HFLD label and use the optional HFLD Crediting Level approach, national or subnational Participants must demonstrate that they meet the HFLD Score threshold throughout the historical reference period for which data is available. This must be demonstrated at the beginning of each Crediting Period and remains applicable for all five years of the Crediting Period.

Participants whose forest cover is greater than 50% and annual deforestation rate is less than 0.5% during the historical reference period for years in which data is available are eligible to calculate an HFLD Score. The HFLD Score is the sum of the Participant's Forest Cover Score and the Participant's Deforestation Rate Score as exemplified in the illustrative figures below and outlined in the following equations. Participants whose HFLD Score is 0.5 or higher meet the HFLD Score threshold.

- The description of the formula could use more clarity around whether the HFLD Score is calculated as an average of five reference years (such as historical emissions), or a single reference period. For example, should jurisdictions present their annual deforestation rates over five reference years, and take the average of those to inform the Deforestation Rate Score, and then calculate an HFLD Score? Or, should they calculate an HFLD Score for each reference year, and then take the average of the HFLD scores? We recommend that the appropriate approach be specified in the methodology document, ideally accompanied by an example.
- We recommend that ART specify whether a jurisdiction must be HFLD compliant in every year of the reference period versus just compliant in the five-year *average* value of forest cover and deforestation rate over the reference period. The methodology for how an HFLD score is calculated (previous bullet) would impact this. This is pertinent to jurisdictions that are on the cusp of having HFLD status and meet the designation when using an *average* of five years, but in a single year of the reference period had a deforestation rate slightly higher than the 0.5% cutoff. If a jurisdiction needs to be HFLD compliant in all five years (or not) of the reference period, then this should be explicitly stated in the methodology document and be accompanied by an example.



Section 5.2 CALCULATING A TREES CREDITING LEVEL FOR HFLD PARTICIPANTS (OPTIONAL APPROACH)

Equation 2

$$\text{HFLDCL}_n = \text{CL}_n + (\text{HFLD Score}_t * \text{Carbon Stock})$$

WHERE:

<b>HFLDCL<sub>n</sub></b>	HFLD Crediting Level for crediting period <b>n</b> ; t CO <sub>2</sub> e/yr
<b>CL<sub>n</sub></b>	Crediting Level for crediting period <b>n</b> ; t CO <sub>2</sub> e/yr (Section 5.1)
<b>HFLD Score<sub>t</sub></b>	HFLD Score averaged across reference period (Section 9)
<b>Carbon Stock</b>	0.1% of Standing Forest Carbon Stock within jurisdiction

- We support the inclusion of a forest carbon stock value as a term within the crediting line equation for HFLD jurisdictions. Creating an incentive for the preservation of standing forest carbon stocks such that HFLD jurisdictions are resistant to future pressures, including via international leakage, is a central value of the HFLD approach. Direct inclusion of carbon stocks as an equation term is an efficient and straightforward way to achieve those goals, consistent with a “stock-flow” methodology.
- We recommend that the ART Secretariat include in their Statement of Reasons a rationale for the use of the 0.1% multiplier. We also suggest that ART consider the possibility of revisiting the fixed 0.1% multiplier in future updates, based on factors that could include changing global deforestation rates, as well as the overall balance of HFLD to non-HFLD credits, as discussed previously in the “Tagging HFLD credits” section.
- Estimates of forest carbon stocks can vary widely and are often dependent on the methodology used to calculate them (including definition of forest)<sup>16</sup>. Considering the HFLD Crediting Level is heavily reliant on a participant’s forest carbon stock estimates, we suggest that ART provide specific guidance to jurisdictions on acceptable methodologies for calculating this term, similar to that provided for emissions and removals estimation.

<sup>16</sup> Baccini, A., Goetz, S., Walker, W. *et al.* (2012). Estimated carbon dioxide emissions from tropical deforestation improved by carbon-density maps. *Nature Climate Change*. 2, 182–185. <https://doi.org/10.1038/nclimate1354>

Equation 2

$$\text{HFLDCL}_n = \text{CL}_n + (\text{HFLD Score}_t * \text{Carbon Stock})$$

WHERE:

HFLDCL <sub>n</sub>	HFLD Crediting Level for crediting period n; t CO <sub>2</sub> e/yr
CL <sub>n</sub>	Crediting Level for crediting period n; t CO <sub>2</sub> e/yr (Section 5.1)
HFLD Score <sub>t</sub>	HFLD Score averaged across reference period (Section 9)
Carbon Stock	0.1% of Standing Forest Carbon Stock within jurisdiction

- While we support the inclusion of the Forest Cover Score in the qualifying criteria for HFLD regions, we question the rationale for multiplying the carbon stock term in equation 2 by the HFLD Score, as currently defined. In particular, we suggest removing the forest cover component of the HFLD score from a carbon stock multiplier in Equation 2. This component, the relative amount of forest in a jurisdiction, is already reflected in the standing forest carbon stock term of the HFLD Crediting Level equation, so including forest cover as a component of the carbon stock multiplier essentially modifies the crediting level on the basis of forest cover twice. If forest cover falls, in theory the carbon stock value will also fall proportionally. It might be true that the share of forest area could affect future risk of deforestation, but this might be expected to follow a non-linear inverted U shape<sup>17</sup> rather than a fixed linear relationship. It is thus not clear that a greater share of forest area should necessarily increase the weight on the carbon stock term.
- Under our proposed revision to the formula, forest cover would still enter into the calculation of the HFLD Score used to determine qualification for HFLD status, but the HFLD Score used as a carbon stock multiplier should only be determined by deforestation rate. Specifically, we recommend that the HFLD Score<sub>t</sub> in Equation 2 could be replaced with a rescaled version of DRS<sub>t</sub> from Equation 9. This would give more (less) weight to carbon stocks where forest loss rates are lower (higher) to provide incentives to maintain carbon stocks when this is not feasible via the crediting level based on historical emissions alone.

<sup>17</sup> Busch, J. & Engelmann, J. (2017). Cost-effectiveness of reducing emissions from tropical deforestation, 2016–2050. *Environmental Research Letters*. 13, 015001. <https://doi.org/10.1088/1748-9326/aa907c>

For each year of the Crediting Period, HFLD Participants must compare their total reported annual emissions with  $CL_n$  in Equation 2. If the total annual emissions exceed the crediting level, a deduction must be applied to the total credits generated (Section 10). The deduction shall be as follows:

Percent annual emissions exceed historical average	Deduction applied
<15%	0
16-35	10%
36-55	20%
56-75	30%
>75%	No credits

- We support the addition of the deductions to provide a conservative approach with an added level of assurance to further strengthen additionality and incentives to reduce emissions in absolute terms even from relatively low levels.
- HFLD Crediting Level deductions are ambiguous in that it is unclear from the current language whether the deduction is applied to credits generated under the HFLD Crediting Level, or to the total credits generated in Section 10, which refers to the default TREES Crediting Level. The standard would benefit from more explicit language noting that the exceedances are calculated relative to the default TREES Crediting Level, but the percentage deductions are “applied to cumulative credits generated under the modified HFLD Crediting Level”.
- This section would be more clear if it elaborated that these potential deductions due to exceeding reference year emissions are *in addition to* the standard deductions (leakage, uncertainty, buffer pool contributions) that must be applied to credits generated using the HFLD Crediting Level.
- The table above needs some clarification on the column “Percent annual emissions exceed historical average.” For example, the document mentions “fluctuations of 15% or less are considered allowable by HFLD jurisdictions.” If so, the mathematical sign should be less than or equal to 15%. The next line needs to start with >15%, and so on.

It would be helpful if ART could provide a sample case study, broken out annually by reference year. The applicability of intended rules to the terms of the equation are ambiguous when it comes to multiple reference and crediting years. We suggest that ART adds a numerical example as a complementary module, using a hypothetical jurisdiction and its relevant metrics broken out by all five reference years to ensure that all applicants follow the same calculations to determine crediting levels. We also suggest that ART publish a template spreadsheet with pre-filled formulas that applicants could download and fill out. This would ensure clarity

regarding averages and decimal places, leakage and uncertainty deductions, and buffer pool contributions in relation to the HFLD Crediting Level.

## Additional input

We want to reiterate [our original suggestion](#) submitted on April 5, 2021 as a proposed update to TREES 2.0 that contiguous groups of Indigenous territories or Indigenous territories and protected areas be allowed to apply as subnational entities to meet the minimum threshold of 2.5 million hectares. This is pertinent to designation of jurisdictions as HFLD, as many of these areas are on Indigenous Territories and Traditional Peoples' lands. We also urge that all Indigenous and protected areas within a qualifying national or subnational jurisdiction must be included if non-contiguous areas are being combined for the purpose of meeting the 2.5 million hectares, in order to avoid issues with selectively picking and choosing particular areas.

Please see this section pasted below:

“TREES 2.0 currently states “the boundaries of a subnational accounting area shall correspond with the entire area of one or several administrative jurisdictions no more than one level down from national level and one or several recognized Indigenous territories; AND Participating subnational jurisdiction(s) must be comprised of a total forest area of at least 2.5 million hectares.” We fully support TREES 2.0’s scale requirements as a key measure to ensure credit integrity. We also recognize that the 2.5 million hectare requirement may be prohibitive for the inclusion of many individual Indigenous territories. Given this, we recommend including provisions for contiguous groups of Indigenous territories and protected areas (including extractive reserves and their analogues), which may often contain traditional populations, to be eligible for crediting. Indigenous territory participants should have the option of aggregating non-contiguous Indigenous lands and protected areas, including Indigenous protected areas, as part of a submission, as long as they include all such areas within a national or subnational jurisdiction to avoid self-selectivity.

We urge the inclusion of language in the TREES standards that mandates such aggregated participants must have the free, prior, and informed consent of the local communities inhabiting the regions included in such submissions.

To the extent that federal or jurisdictional governments are the entities leading the aggregation of Indigenous lands and protected areas within jurisdictional participant submissions, we urge the inclusion of language in the TREES standards that mandates such government bodies must have the free, prior, and informed consent of the local communities inhabiting the regions included in such submissions.”

Environmental Defense Fund would like to express appreciation for the opportunity to provide comments to the Public Consultation for Revised HFLD Crediting Level Approach in TREES 2.0, and commends the efforts of the Secretariat of the Architecture for REDD+ Transactions to update the HFLD Crediting Level approach to provide incentives for both reducing emissions and for maintaining forest carbon stocks. EDF hopes that the ART Secretariat takes the comments and suggestions raised into consideration. We are available to discuss any of these inputs in greater detail.