



## **ART Board Statement Regarding the Integrity of High Forests, Low Deforestation (HFLD) Credits**

June 2022 – The Architecture for REDD+ Transactions (ART) is aware of an opinion piece authored by numerous individuals published in April in *Carbon Pulse* as well as a response published in *Carbon Pulse* in May authored by Wildlife Conservation Society (WCS), Rainforest Foundation Norway and Re:wild as members of the Forests for Life Partnership.

As members of the ART Board, we jointly offer the following statement in response to the assertions of the authors of the original opinion piece that credits from High Forest, Low Deforestation (HFLD) jurisdictions as defined in ART's TREES standard should not be allowed for use to offset emissions by airlines under the International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) because they are not additional.

### **The TREES development and approval process was rigorous, transparent, and consultative.**

As background, The REDD+ Environmental Excellence Standard (TREES) 2.0, including the approach for crediting HFLD jurisdictions, was developed and approved over the course of 18 months in a robust, transparent, inclusive global process, which involved the ART Secretariat at Winrock International, multiple expert committees, numerous analyses by the committees and the Secretariat, global stakeholder consultations with forest countries, civil society and NGOs and market participants, and in-depth deliberations by the ART Board. TREES 2.0 was open for stakeholder consultation for 60 days in mid-2021, and a revised version of the HFLD crediting approach, based on the first round of comments, was open for an additional 30-day consultation.

All comments received and ART's responses to those comments are available in the [TREES 2.0 Comment and Response Log](#) posted on the ART website. The comments on HFLD crediting represent a diversity of views, which is consistent with the complexity of the topic. Of note, of the authors of the *Carbon Pulse* opinion piece, only one works for an entity that provided comments on the HFLD crediting approach during the stakeholder consultation process.

Over the course of over six months and six formal Board meetings, the ART Board carefully considered input received through the committees and the consultation process in making its decisions on TREES 2.0. Several meetings were dedicated to extensive discussions regarding the comments received on the HFLD approach, including the intersection with the proposed pathway for crediting Indigenous Peoples territories. All ART Board decisions for TREES 2.0, including on the approach for crediting HFLD jurisdictions, were taken by full consensus and are documented in the public Board meeting minutes and the [Statement of Reasons](#).

## **ART seeks to provide pathways for all elements of REDD+.**

The Warsaw Framework on REDD+, agreed by the parties to the UNFCCC in 2013 and incorporated into the Paris Agreement, provides a framework for providing developing countries with positive incentives for reducing emissions from deforestation and forest degradation, as well as the sustainable management of forests and the conservation and enhancement of forest carbon stocks. ART seeks to provide crediting approaches for the full range of actions under REDD+.

TREES 2.0 includes crediting approaches for emissions reductions and removals resulting from several types of actions that can be taken by forest countries and communities to contribute to Paris Agreement targets. These actions include not only reducing emissions from deforestation and forest degradation, the most urgent priority for the forest sector, but also protection of intact forests and restoration of formerly forested landscapes to conserve and enhance forest carbon stocks. ART aims to provide crediting pathways for stewards of forests that are historically intact as well as for jurisdictions that have experienced deforestation and are making progress toward establishing high levels of forest cover and low rates of deforestation. By ensuring that all of these forest-related climate actions are eligible for participation in carbon markets, ART offers incentives for all types of jurisdictions to reduce deforestation, restore forests and ultimately achieve High Forest–Low Deforestation (HFLD) status, or to maintain such status where it has not yet been lost.

The authors of the *Carbon Pulse* opinion piece correctly observe that “*jurisdictional crediting baselines are set by assuming that past trends will continue into the future. But HFLD have seen hardly any deforestation in the past and using past deforestation as a basis for predicting future deforestation invariably leads to very low baselines.*” It would be a perverse incentive – and even create moral hazard - if only jurisdictions that currently have high emissions were allowed to participate in carbon markets. A crediting pathway is needed for participation by jurisdictions and Indigenous Peoples territories that are actively conserving forests to avoid forest-related emissions and maintain ongoing removals.

The inclusion of HFLD jurisdictions is especially important because they host the world’s few remaining large expanses of intact forests. Intact forests contribute significant climate mitigation and adaptation benefits by storing and actively sequestering carbon, regulating local and regional climate systems, supplying critical moisture to agricultural lands, and resisting wildfire, which contributes to the permanence of sequestered carbon.<sup>1</sup>

A crediting approach for HFLD jurisdictions is also essential to reward the historical performance of Indigenous communities in protecting forests. Indigenous territories in the Amazon Basin, the Mesoamerican region, the Democratic Republic of Congo and Indonesia are estimated to contain 20 percent of the world’s aboveground terrestrial carbon stocks.<sup>2</sup> And at least 36 percent of the world’s intact forests are within Indigenous Peoples lands.<sup>3</sup> Further, Indigenous territories are shown to

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<sup>1</sup> Funk, J. M. et al. (2019). Securing the climate benefits of stable forests, Climate Policy, DOI: 10.1080/14693062.2019.1598838

<sup>2</sup> EDF and Woods Hole. Tropical Forest Carbon in Indigenous Territories (2015). <https://www.edf.org/sites/default/files/tropical-forest-carbon-in-indigenous-territories-a-global-analysis.pdf>

<sup>3</sup> Fa et al. (2020). Importance of Indigenous Peoples lands for the conservation of Intact Forest Landscapes. *Frontiers in Ecology and the Environment*. <https://doi.org/10.1002/fee.2148>

experience a lower rate of forest loss compared to other areas, suggesting the effectiveness of active protection by Indigenous communities.<sup>4</sup> In TREES 2.0, Indigenous territories are eligible to qualify as sub-national accounting areas and can apply the HFLD crediting approach. This innovation offers Indigenous Peoples a significant new pathway to access carbon markets and associated finance streams. It is for all of these reasons that ART developed a distinct crediting approach for HFLDs.

### **Threats to intact forests are high and increasing.**

The key premise of the authors of the *Carbon Pulse* opinion piece is that intact forests are not under imminent threat and therefore HFLD credits do not represent additional climate action and should not be eligible for carbon market finance. Our assessment of the evidence leads to a different conclusion. While it is true that in many HFLD jurisdictions, protection of forests has until recently been the result of distance from human settlements and roads, the situation is changing rapidly.

Global demand for agricultural commodities and timber that replace or degrade forests, all of which are valued more than standing forests, continues to drive forest loss and degradation at a high rate.<sup>5</sup> Road building, other infrastructure development, and extractive activities for fossil fuel and minerals continue to penetrate ever deeper into previously remote areas and fragment remaining forests.<sup>67</sup>

Already 70% of the world's forests lie within one kilometer of a forest edge, which store on average 25% less carbon than areas far from forest edges, and this proportion is rising.<sup>8</sup> Almost 97 million hectares of intact forest, equal to one-fifth of the global area of intact forest, currently lies within mining, oil and gas concessions.<sup>9</sup> Other areas are under licenses that permit legal logging or clearing for the establishment of oil palm and other plantation crops.<sup>10</sup>

Over the last 20 years, between three to four million hectares of primary tropical rainforest have been lost every year, with a gradual upward trend.<sup>11</sup> Future deforestation is projected to extend into intact, high-carbon forests, resulting in greenhouse gas emissions of an estimated 170 billion tons of CO<sub>2</sub> by 2050,<sup>12</sup> equivalent to four times current annual global CO<sub>2</sub> emissions.

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<sup>4</sup> Blackman & Veit (2018). Titled Amazon Indigenous Communities Cut Forest Carbon Emissions. *Ecological Economics*, Volume 153, <https://doi.org/10.1016/j.ecolecon.2018.06.016>

<sup>5</sup> Curtis et al. (2018). Classifying Drivers of Global Forest Loss, *Science*. <https://www.science.org/doi/10.1126/science.aau3445>

<sup>6</sup> Mataveli et al. (2021). The emergence of a new deforestation hotspot in Amazonia. *Perspectives in Ecology and Conservation*, Volume 19 Issue 1. <https://www.sciencedirect.com/science/article/pii/S253006442100002X#bib0125>

<sup>7</sup> Damania and Wheeler (2015). Road Improvement and Deforestation in the Congo Basin Countries. World Bank Policy Research Working Paper No. 7274, Available at SSRN: <https://ssrn.com/abstract=2607774>

<sup>8</sup> Haddad, N. M. et al. Habitat fragmentation and its lasting impact on Earth's ecosystems. *Sci. Adv.* 1, e1500052 (2015).

<sup>9</sup> Grantham, H.S., Tibaldeschi, P., Izquierdo, P., Mo, K., Patterson, D.J., Rainey, H., ... Jones, K.R. (2021). The emerging threat of extractives sector to intact forest landscapes. *Frontiers in Forests and Global Change*, 4, <https://doi.org/10.3389/ffgc.2021.692338>

<sup>10</sup> Jong, H.N., (2021). A million hectares of Papuan forest licensed for clearing. *Mongabay*. <https://news.mongabay.com/2021/03/papua-forest-licensed-for-clearing-future-deforestation-report/>

<sup>11</sup> Weisse & Goldman (2022). Tropical Primary Forest Loss 2001-2021. *Global Forest Watch*, World Resources Institute. <https://research.wri.org/gfr/latest-analysis-deforestation-trends>

<sup>12</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>

Moreover, there is a clear risk that deforestation pressures will shift to HFLD jurisdictions as high deforestation regions engage in efforts to reduce their rates of forest loss, incentivized in part by the prospect of revenues from forest carbon credits. This displacement or “leakage” effect, if left unaddressed, can erode efforts to control deforestation-related emissions at a global scale. Financial incentives to maintain carbon stocks in HFLD areas can be an effective solution to reduce the risk of such leakage across jurisdictions.

### **The TREES crediting level for HFLD jurisdictions is conservative.**

Like the crediting level (baseline) calculation for non-HFLD TREES Credits, the HFLD crediting level is based on five years of historic emissions from deforestation and forest degradation. However, the HFLD crediting level calculation also takes forest stocks into consideration as a way of adjusting the baseline to recognize the importance of forest conservation for achieving global climate goals. Jurisdictions that qualify as HFLD have the option to use the HFLD crediting approach, which is conservative in that only 0.05% of the forest carbon stock in the jurisdiction is included in the crediting level calculation.<sup>13</sup> Use of an adjustment based on carbon stock is a proxy for a combination of factors related to the impacts of intact forest loss on the global climate.

First, unadjusted crediting levels fail to take into account knock-on degradation and foregone removals associated with intact forest loss. It is estimated that for each hectare of intact forest cleared, seven hectares of forest edges are created (with much larger edge areas reported in Gabon and Guyana)<sup>14</sup>. Such degradation, combined with foregone removals, is estimated to increase the impact of intact forest loss by more than 600%.<sup>15</sup>

In addition, recently published scientific analysis<sup>16</sup> shows that the biophysical global cooling effect of tropical forests extends significantly beyond the effects moderated through carbon cycle as measured in terms of CO<sub>2</sub> fluxes. These effects render all REDD+ credits even more conservative than they already are in terms of their contributions to global climate change mitigation, with intact forests making the most significant contributions.

### **ART HFLD credits are additional and fungible.**

All ART Board decisions must adhere to ART’s Immutable Principles including that ART shall “*Embody high environmental integrity, including accounting for the uncertainty of data and the risks of leakage and reversals, the avoidance of double counting, and result in issued units that are interchangeable with emission reduction units from other sectors.*”

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<sup>13</sup> By comparison, the World Bank Carbon Fund Forest Carbon Partnership Facility (FCPF) uses a 0.1% adjustment factor.

<sup>14</sup> Maxwell, S. L. et al. (2019). Degradation and foregone removals increase the carbon impact of intact forest loss by 626%. *Science Advance* 5(10). <http://advances.sciencemag.org/content/5/10/eaax2546>

<sup>15</sup> *ibid*

<sup>16</sup> Lawrence et al. (2022). The Unseen Effects of Deforestation: Biophysical Effects on Climate. *Frontiers in Forests and Global Change* 5, <https://www.frontiersin.org/article/10.3389/ffgc.2022.756115>

In approving the HFLD crediting approach included in TREES 2.0, we explicitly deliberated over this principle, and took into consideration the range of views expressed during the public consultation period. We concluded that in light of the growing threats to all tropical forests, combined with the growing body of evidence regarding the critical role played by intact forests in maintaining the global climate system, a conservative approach to HFLD crediting could yield credits that are additional and fungible with those generated from other sectors.

HFLD crediting in TREES represents additional climate action because TREES requires that all HFLD jurisdictions have a REDD+ implementation strategy that establishes the actions they are taking and investments they are making to mitigate the drivers of deforestation and to support the maintenance of low deforestation rates. Such strategies include the operationalization of forest monitoring systems and the enforcement of policies that improve forest governance. These actions have contributed to the maintenance of low deforestation rates in their jurisdictions. Without market incentives, it is less likely that forests in HFLD areas will remain effectively protected. Moreover, providing incentives to jurisdictions with intact forests to maintain those forests lowers the risk of deforestation shifting to these countries as nearby jurisdictions with high deforestation begin reducing their forest-related emissions.

### **Conclusion**

There is no scenario to achieve Paris Agreement targets without reducing deforestation and protecting and restoring tropical forests in the next decade. We need a “both/and” approach to driving finance at scale to all of the actions that will achieve results at scale. An equitable global solution should be inclusive in providing access to markets to incentivize the full range of necessary actions needed for forest countries and communities to contribute to Paris Agreement targets. We believe that the risks of non-additionality of conservatively-issued HFLD credits pale in comparison to the risks of losing the world’s remaining expanses of intact forests, and the impacts of such loss on global climate stability.

Frances Seymour, ART Board Chair  
Carlos Nobre, ART Board Vice-Chair  
Lucia Ruiz  
Roselyn Fosuah Adjei  
Pasang Dolma Sherpa  
Agnes Kalibata  
Bill Bumpers