

# Conservatively Issued Jurisdictional-Scale HFLD Credits Represent **Additional** Emission Reductions

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The following is a condensed list of supporting arguments and evidence for why conservatively issued jurisdictional-scale high forest, low deforestation (HFLD) credits are high-integrity and should be considered fungible with any other high-integrity emissions reduction or removal credits. It provides a brief explanation of why HFLD credits are additional, focusing on the emissions that would be expected to occur in the absence of the crediting mechanism. Refer to the white paper “Justification for High Forest, Low Deforestation Crediting” for more detailed information, available at [edf.org/HFLD](http://edf.org/HFLD).

## **Deforestation happens in HFLD jurisdictions. Forests in HFLD jurisdictions are currently at risk and their emerging threats shift rapidly.**

- a) According to one widely used definition, HFLD countries have at least 50% forest cover and experience deforestation at a lower rate than the global average<sup>i</sup>. Deforestation is predicted to rise across the tropics in the absence of economic incentives for forest conservation even in areas where deforestation has been historically low – HFLD areas.<sup>ii,iii</sup>
- b) Six countries *lost* HFLD status<sup>iv</sup> over the last decade (2010-2019): Cambodia, Colombia, Laos, Samoa, Sao Tome and Principe, and Zambia, a very strong indication that HFLD status cannot be expected to continue indefinitely without ongoing intervention.
- c) Intact forests are threatened by the same forces, such as sudden commodity price swings, that are increasing deforestation rates worldwide as encroachment becomes more widespread and infrastructure and extractive activities extend into previously remote areas.<sup>v,vi</sup>

## **Avoiding deforestation and conserving forest carbon stock in HFLD areas requires active and ongoing intervention.**

- a) Many Indigenous lands fall within HFLD designation as they often contain largely intact forests<sup>vii</sup> and have higher forest cover than adjacent areas<sup>viii</sup> due to persistent efforts of their inhabitants to address the drivers of deforestation<sup>ix,x,xi</sup>.
- b) HFLD jurisdictions implement the same REDD+ activities as non-HFLD jurisdictions (e.g., enacting forest management plans, establishing protected areas, developing REDD+ regulation and policies, etc.). While such actions are generally considered additional when practiced by non-HFLD jurisdictions to *lower* their deforestation, they are falsely interpreted as non-additional when practiced by HFLD jurisdictions to *maintain* their low levels of deforestation. In both instances similar jurisdictional activities are implemented to conserve existing forest carbon stocks by addressing the drivers of forest loss – the HFLD jurisdictions simply start from a point of lower deforestation.
- c) REDD+ interventions dampen deforestation pressures, evidenced by Guyana’s successful 2010-2015 REDD+ program, which reduced tree cover loss by 35%.<sup>xii</sup>

## The existing HFLD crediting methodology (TREES) is sufficiently conservative to avoid the risk of over-crediting.

- a) HFLD credits reward jurisdictions for resisting drivers of deforestation and conserving high forest carbon stocks, thus preventing forest carbon from being emitted. HFLD credits represent real emission reductions.
- b) TREES HFLD approach incentivizes jurisdictions to achieve and maintain HFLD status and penalizes any rising emissions from deforestation and forest degradation. HFLD crediting requires the same discounts as non-HFLD crediting for leakage, uncertainty, and reversals, along with REDD+ implementation plans to mitigate drivers of deforestation and degradation.
- c) TREES uses a conservative factor to calculate the HFLD crediting level (up to 0.05% of forest carbon stock). Considering the annual sequestration of intact tropical forests is about 0.3% of average carbon stock<sup>xiii</sup>, and the climate impact of preserving intact forests is six times greater than emissions lost from deforestation alone<sup>xiv</sup>, the TREES methodology likely underestimates the true climate benefit delivered by these forests.

## HFLD crediting further strengthens conservativeness and rigor of forest carbon crediting, as it addresses risks of international leakage and perverse incentive to deforest.

- a) There is a potential risk that deforestation pressure will shift to HFLD jurisdictions as high-deforestation regions engage in efforts to reduce their local rates of forest loss. The displacement of emissions due to mitigation activities across borders (international leakage) can erode efforts to control deforestation at a global scale.<sup>xv,xvi</sup>
- b) Studies suggest that creating incentives, such as through the purchase of carbon credits, to maintain carbon stocks in HFLD areas can be an effective solution to reduce the risk of leakage<sup>xvii</sup>. Such an approach ensures that areas where deforestation is low and where ongoing efforts to reduce emissions have been succeeding (e.g., Indigenous Territories) are rewarded. Otherwise, landowners would only be able to earn credits after deforestation had increased – a perverse and myopic outcome.
- c) While there are different potential designs of an HFLD crediting approach, the greatest benefit for limiting forest emissions and global cost-effectiveness comes from the inclusion, rather than the exclusion, of HFLD crediting as part of the international portfolio of REDD+ strategies.<sup>xviii</sup> Providing financial incentives to HFLD jurisdictions before they experience a spike in deforestation pressure is thus a crucial and equitable way to protect forests at a global scale over the coming decade.

### Case Study: Guyana – Existing HFLD crediting methodology sufficiently conservative to capture growing risk of forest loss

Guyana is an HFLD country with over 18 million hectares of forest. The main driver of deforestation in Guyana is gold mining. At present, there are over 7,200 contracts for gold mining that overlap with intact forest landscapes in Guyana. Most of these gold mining contracts are in an exploration permit stage. If exercised, this extractive activity risks deforestation of 16% of the country's forest area (approximately 2.9 million hectares).

Guyana recently received credits for its 2016-2020 REDD+ performance using the current TREES HFLD methodology. The conservative HFLD adjustment portion of the crediting methodology resulted in a less than 0.05% multiplier of the country forest carbon stock. The HFLD adjustment under TREES reflects an additional area of 7,000 or so hectares being protected from loss every year, on top of any reductions of emissions from deforestation or degradation that the country achieves. This conservative adjustment is equal to less than one percent of the land that is actually under threat of forest loss in any given year due to gold mining contracts. Clearly, more of the country's area is potentially at threat of forest loss, yet Guyana received credits for conserving only a tiny fraction of its vast 18 million hectare accounting area, in addition to lowering its average annual emissions.

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- <sup>i</sup> A value of 0.296% based on FAOSTAT data from 2000-2010. This definition is based on a 10-year historical approach presented in da Fonseca, GAB. et al. (2007). No Forest Left Behind. *PLoS Biol*, 5(8), e216. <https://doi.org/10.1371/journal.pbio.0050216>
- <sup>ii</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>iii</sup> Mather, A. & Needle, C. (1998). The Forest Transition: A Theoretical Basis. *Area*, 30(2), 117–124. [www.istor.org/stable/20003865](http://www.istor.org/stable/20003865)
- <sup>iv</sup> HFLD status was lost due to lower forest cover than the 50% threshold or due to a higher deforestation rate than the global average, using the da Fonseca et al (2007) approach, with an updated average global deforestation rate of 0.263% based on FAOSTAT data from 2009-2019, presented in World Bank Group. (2021). Options for conserving stable forests. <http://documents1.worldbank.org/curated/en/541251635971110855/pdf/Options-for-Conserving-Stable-Forests.pdf>
- <sup>v</sup> Dezécache, C. et al. (2017). Gold-rush in a forested El Dorado: deforestation leakages and the need for regional cooperation. *Env Res Letters*, 12(3), 034013. <https://doi.org/10.1088/1748-9326/aa6082>
- <sup>vi</sup> Caballero Espejo, J. et al. (2018). Deforestation and forest degradation due to gold mining in the Peruvian Amazon: a 34-year perspective. *Remote Sensing*, 10(12), 1903. <https://doi.org/10.3390/rs10121903>
- <sup>vii</sup> Fa, J.E. et al. (2020). Importance of Indigenous People's lands for the conservation of Intact Forest Landscapes. *Frontiers in Ecology and the Environment*, 18(3), 135-140. <https://doi.org/10.1002/fee.2148>
- <sup>viii</sup> Walker, W.S. 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>ix</sup> Walker, W.S. et al. (2015). Forest carbon in Amazonia: the unrecognized contribution of indigenous territories and protected natural areas. *Carbon Management*, 5(5-6), 479-485. <https://doi.org/10.1080/17583004.2014.990680>
- <sup>x</sup> Alejo, C. et al. (2021). Are indigenous territories effective natural climate solutions? A neotropical analysis using matching methods and geographic discontinuity designs. *PLoS ONE*, 16(7), e0245110. <https://doi.org/10.1371/journal.pone.0245110>
- <sup>xi</sup> FAO and FILAC. (2021). Forest Governance by Indigenous and Tribal People. An Opportunity for Climate Action in Latin America and the Caribbean. Santiago. <https://doi.org/10.4060/cb2953en>
- <sup>xii</sup> Roopsind, A. et al. (2019). Evidence that a national REDD+ program reduces tree cover loss and carbon emissions in a high forest cover, low deforestation country. *PNAS*, 116(49), 24492-24499. <https://doi.org/10.1073/pnas.190402711>
- <sup>xiii</sup> Baccini, A. et al. (2017). Tropical forests are a net carbon source based on aboveground measurements of gain and loss. *Science*, 358(6360), 230-234. <https://doi.org/10.1126/science.aam5962>; Pan, Y. et al. (2011). A large and persistent carbon sink in the world's forests. *Science*, 333(6045), 988-993. <https://doi.org/10.1126/science.1201609>; Phillips, O.L. et al. (2009). Changes in Amazonian forest biomass, dynamics, and composition, 1980-2002. *Amazonia and Global Change*, 186, 373-387. <https://doi.org/10.1029/2008GM000739>; Baker, T.R. et al. (2004). Increasing biomass in Amazonian forest plots. *Phil Trans Royal Society B*, 359, 353-365. <https://doi.org/10.1098/rstb.2003.1422>
- <sup>xiv</sup> Maxwell, S.L. et al. (2019). Degradation and forgone removals increase the carbon impact of intact forest loss by 626%. *Science Advances*, 5(10). <https://doi.org/10.1126/sciadv.aax2546>
- <sup>xv</sup> da Fonseca, G.A.B. et al. (2007). No Forest Left Behind. *PLoS Biol*, 5(8), e216. <https://doi.org/10.1371/journal.pbio.0050216>
- <sup>xvi</sup> Gan, J. and McCarl, B. (2007). Measuring transnational leakage of forest conservation. *Ecological Economics*, 64(2), 423-432. <https://doi.org/10.1016/j.ecolecon.2007.02.032>
- <sup>xvii</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>xviii</sup> Ibid.

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