

# HIFOR Units and the Biodiversity Credits Market



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# The HIFOR Initiative in a Nutshell

### The HIFOR Initiative in a Nutshell

High integrity tropical forests provide significant climate and biodiversity benefits. These forests have high levels of biodiversity and deliver multiple ecosystem services including the regulation of global climate and rainfall patterns<sup>1</sup> as well as bio-physical cooling effects at local, regional and global scales.<sup>2</sup> However, less than 1 percent of the estimated financial needs to protect tropical forests by 2050 is being met. High integrity tropical forests receive comparatively even less finance than tropical forests that are under immediate threats (which can <u>therefore benefit</u> from REDD+ finance). Without adequate funding for their conservation, these forests are likely to face degradation and deforestation.

The HIFOR Initiative addresses this problem and seeks to channel finance to high integrity tropical forests through the sale of HIFOR units. These tradeable units represent a bundle of climate and biodiversity benefits associated with one hectare of well-conserved, high integrity tropical forest. Investing in HIFOR units gives companies the ability to make verified, certified claims about their contributions to protecting high integrity tropical forests, and the carbon sequestered and biodiversity conserved in those tropical forests. Among other claims, investors may use HIFOR units to make claims about beyond-value chain mitigation, biodiversity-related goals, and conserving the ecosystem services provided by high integrity tropical forests such as rainfall and temperature regulation.

The HIFOR Initiative defines "well-conserved tropical forest" as one in which integrity is maintained over a decade through equitable, effective management. Integrity is measured by the Forest Landscape Integrity Index (FLII). The FLII measures forest integrity by assessing the presence of drivers of forest degradation using multiple data sources, including satellite imagery and OpenStreetMap. It accounts for forest extent, degree of fragmentation caused by human disturbances, and edge effects. It considers a forest free (or nearly free) from human pressures to be in a state of high ecological integrity. The HIFOR methodology requires that HIFOR project areas maintain the extent of high integrity tropical forest above a minimum threshold and ensure low rates of forest integrity decline.

<sup>1</sup> Smith, C., Baker, J. C. A., & Spracklen, D. V. (2023). Tropical deforestation causes large reductions in observed pred <sup>2</sup> Lawrence, D., Coe, M., Walker, W., Verchot, L., & Vandecar, K. (2022). The Unseen Effects of Deforestation: Biophy: Frontiers in Forests and Global Change, 5. Retrieved February 13, 2023, from https://www.frontiersin.org/articles/IC



# Biodiversity Crediting in a Nutshell



#### **Biodiversity Crediting in a Nutshell**

HIFOR units show significant overlap with biodiversity credits that convert quantifiable benefits to biodiversity into verifiable and tradable units. Biodiversity crediting systems quantify biodiversity impacts with the goal to promote conservation efforts and facilitate private investments in biodiversity conservation. Such systems are backed by public or private standards that define methodologies for monitoring and certifying positive impacts of projects on local biodiversity. Such methodologies quantitatively estimate the outcomes of activities aimed at improving ecological conditions — what is sometimes referred to as biodiversity 'uplift' — within a project area. Government systems can be mandatory for liable companies, while schemes designed and managed by private organizations enable buyers to meet voluntary commitments.

On the demand side, an increasing number of private sector actors are interested in biodiversity credits. Investor interest in nature conservation has grown in the wake of the Kunming-Montreal Global Biodiversity Framework (GBF). Target 15 GBF invites governments to take legal, administrative, and policy measures that encourage businesses to assess their dependencies and impacts on biodiversity and to disclose nature-related risks. Companies may be motivated by the direct benefits to their business associated with the delivery of ecosystem services. They may also be incentivized to invest in biodiversity conservation and ecosystem restoration as a result of assessments of biodiversity impacts and dependencies within their business practices and supply chains. Investments into biodiversity conservation may help to reduce associated regulatory, financial, or reputational risks.<sup>3</sup>

On the supply side, over 40 international- and nationallevel biodiversity crediting systems have emerged in the last two years.<sup>4</sup> Examples of schemes include: public policy-driven, national initiatives like <u>Australia's</u> <u>Nature Repair Market Bill</u> or the <u>United Kingdom's Nature</u> <u>Markets Framework</u>; private sector national-level schemes like <u>NaturePlus credits</u> designed by GreenCollar in Australia and <u>Voluntary Biodiversity Credits</u> designed by Terrasos and ClimateTrade in Colombia; and international schemes like <u>Verra's SD VISta Nature Framework</u> and <u>Plan</u> <u>Vivo Nature</u>.<sup>5</sup>

The international biodiversity credits market, so far, is lacking common definitions, indicators, and principles. To operate effectively and efficiently, biodiversity crediting schemes need to establish common standards and definitions, which is challenging considering the diversity of global ecosystems. This makes the use offsets particularly controversial in biodiversity markets. While compensation for residual adverse biodiversity impacts arising from project development is often possible or even mandated in national regulated biodiversity schemes, most international biodiversity credits are not designed to enable offsetting.

Verra's SD VISta Nature Framework (v0.1), Plan Vivo Nature (v1.0, hereafter PV Nature), and Terrasos' Voluntary Biodiversity Credits (v3.0) are prominent biodiversity crediting initiatives that are likely to influence the emerging market. By offering structured and auditable channels for companies and investors to engage in nature conservation, these crediting systems aim to support global goals while also providing tangible benefits for businesses by enhancing their corporate environmental goals. None of the three biodiversity crediting systems offers offsets, meaning that companies cannot purchase credits for the purpose of offsetting negative impacts caused by business operations on ecosystems. The methodologies published so far do not include metrics to evaluate the equivalence between impacts and remediations.

<sup>3</sup>World Economic Forum (2023), Biodiversity Credits: Demand Analysis and Market Outlook, p. 13-14.

<sup>4</sup> Palmegiani et al (2023), Biodiversity Credits Market: Charting pathways for early investment and sustainable market growths.

https://climatefocus.com/wp-content/uploads/2023/10/Biodiversity-credits-markets-report-Climate-Focus.pdf

<sup>5</sup>Streck (2023), Harmonized Biodiversity Claims as a Solution for Fragmented Biodiversity Markets, Shades of REDD+, Lawrence, D., Coe, M., Walker, W., Verchot, L., & Vandecar, K. (2022). The Unseen Effects of Deforestation: Biophysical Effects on Climate. Frontiers in Forests and Global Change, 5. Retrieved February 13, 2023, from https://www.frontiersin.org/articles/10.3389/ffgc.2022.756115.



## How Does the HIFOR Initiative Compare with These Systems?

### How Does the HIFOR Initiative Compare with These Systems? Eligible Activities: Conservation vs. Restoration

All three biodiversity crediting systems issue biodiversity credits for both activities that conserve intact ecosystems and those that restore degraded ecosystems. This means that these systems credit the positive change of biodiversity 'uplifts' against a reference scenario of degradation. In general, ecological restoration of ecosystems is more likely to produce measurable changes in the short- to medium-term, and some methodologies - such as the one from Terrasos - assign higher weight to restoration projects than they do to conservation projects. All three systems also issue credits for conservation of habitats or ecosystems. Terrasos and PV Nature focus on certifying biodiversity outcomes over relatively small areas, while the SD VISta Nature Framework and the HIFOR methodology are designed to certify ecosystem-level conservation over larger areas.

HIFOR units are issued based on the maintenance of the high integrity of tropical forests within a HIFOR management area rather than performance against a baseline of degradation.

They resemble the "Nature Stewardship Credits" envisioned by the SD VISta Nature Framework. Stewardship credits are meant to "reward successful, verified nature conservation and management outcomes based on stability and resilience of ecosystems without using counterfactuals (i.e., degrading baselines) or demonstrating increases in ecosystem condition." Both HIFOR units and Verra's Nature Stewardship Credits:

- Reward nature stewards such as Indigenous Peoples and local communities — as part of their conservation strategies
- ii) Do not demand additionality for the issuance of credits
- iii) Use methodologies that can be applied at the jurisdictional level
- iv) Allow the mobilization of resources at scale

The SD VISta Nature Framework states that at least 95% of the original project area needs to remain intact to be eligible for the issuance of Nature Stewardship Credits. Similarly, the HIFOR methodology sets a threshold of 80% of the project area being high integrity at the project start date and in each subsequent monitoring period to be eligible for HIFOR units.

PV Nature and Terrasos create incentives for protecting habitats of species under threat while HIFOR aims to conserve high integrity tropical forests regardless of the level of threat. PV Nature primarily focuses on protecting vulnerable species under threat while the HIFOR methodology requires that tropical forests in project areas have high integrity and focuses on maintaining that condition. The PV Nature methodology specifies that "[t]o be eligible to issue Plan Vivo Biodiversity Conservation Certificates, a project area must meet at least one of the Key Biodiversity Area (KBA) criteria, or two of the Important Plant Area (IPA) criteria, i.e., conservation certificates can only be issued by projects that are conserving important and threatened biodiversity." Similar to PV Nature, Terrasos' methodology prioritizes projects aiming to restore degraded ecosystems, which are weighted more highly by the Terrasos methodology than projects aiming to conserve natural areas. PV Nature and Terrasos credits are complementary to HIFOR units, i.e., these credits can be combined with HIFOR units and create additional incentives to protect species within HIFOR management areas that are under threat.

### Target Ecosystem and Indicators

The HIFOR Initiative differs notably from the biodiversity crediting system in its focus on one type of ecosystem: high integrity tropical forests. While the HIFOR Initiative focuses solely on high integrity forests, global biodiversity crediting schemes such as PV Nature and SD VISta Nature Framework attempt to embrace any ecosystem. Terrasos is also ecosystem agnostic, but it primarily focuses on threatened ecosystems in Colombia. Wide ecological coverage may enhance the market potential of such schemes, but compromises on the specificity and robustness of crediting methodologies. The HIFOR methodology is able to be more specific because it was developed with a narrow focus on measuring and monitoring the integrity of tropical forest ecosystems.

HIFOR relies on one ecosystem-specific methodology. The three analyzed biodiversity crediting methodologies combine multiple ecosystem-agnostic indicators with the objective of monitoring species, habitats, and ecosystems within a project area. The HIFOR methodology is distinct from these combined methodologies for biodiversity crediting in that it leverages one forest-specific metric the FLII — encompassing multiple habitat-level indicators.

This approach of using a single, holistic, and ecosystemspecific methodology guarantees a degree of equivalence of HIFOR units generated in different regions and forest types and is well-suited for quantitatively representing and communicating complex ecological dynamics that may otherwise be cryptic to buyers and other stakeholders in the emerging nature market. In contrast, biodiversity crediting systems combine multiple indicators — such as community composition, habitat connectivity, species richness, and management objectives — to monitor progress and impacts within a project area. SD VISta Nature Framework, PV Nature, and Terrasos vary widely in their indicators, which exemplifies the diversity of approaches adopted in nature crediting methodologies more generally. 10 of 13





### Conclusion

HIFOR units and biodiversity credits represent distinct approaches to nature conservation and stewardship. The HIFOR Initiative adopts a 'stewardship' approach to conservation by rewarding the continued maintenance of high integrity tropical forests. Biodiversity crediting methodologies primarily reward biodiversity 'uplifts' or improvements estimated against a baseline. Although all three reviewed systems also issue credits that reward maintenance, their focus is on restoring habitats of threatened species or degraded ecosystems.

The HIFOR Initiative creates incentives for conservation at scale. PV Nature and Terrasos seek finance for smaller conservation and restoration projects. In contrast, the SD VISta Nature Framework and the HIFOR methodology are designed so that they can be implemented over larger areas or jurisdictions. The HIFOR methodology can be applied to large management areas of high integrity tropical forests, which could be at the level of a jurisdiction. Both the HIFOR Initiative and the SD VISta Nature Framework complement jurisdictional REDD+ programs by providing finance for conservation of forest ecosystems and biodiversity that may not be eligible to access REDD+ finance.<sup>6</sup>

The HIFOR Initiative stands out with its focus on high integrity tropical forests. With its goal to provide finance for tropical forests and its dedicated methodology, the HIFOR Initiative offers buyers the opportunity to directly and exclusively contribute to the conservation of tropical forests. Due to its focus on high integrity tropical forests and use of the FLII as a single, consistent metric, HIFOR units are also more comparable among each other than biodiversity credits. HIFOR buyers acquire a holistic bundle of climate and biodiversity benefits. This bundled approach recognizes the inherent interconnectedness of these benefits, providing a methodologically sound solution to combine all ecosystem benefits of high integrity tropical forests. Buying HIFOR units that represent one hectare of high integrity tropical forests allows buyers to circumvent the particular challenges that come with credits that rely on biodiversity indicators that are difficult to measure and compare.

HIFOR units and biodiversity credits could play complementary roles in channeling finance for conservation. For example, PV Nature Certificates representing the protection of vulnerable species and HIFOR units representing the maintenance of high integrity forest ecosystems could be generated from and channel finance to the same landscape. Similarly, HIFOR units could be combined in an investment portfolio with credits representing biodiversity, forest restoration or avoided deforestation. HIFOR units or projects could also potentially be combined with efforts focused on biodiversity uplift. This opportunity to stack HIFOR units with other certifications or credits reduces regulatory and reputational risks for investors and adds value.

6 Wildlife Conservation Society and Climate Focus (2023), A Climate- and Nature-Positive Market-Based Instrument to Protect High Integrity Tropical Forests.

https://cdn.wcs.org/2023/11/27/12/52/39/29e58829-1d3a-4dff-9d7e-fc505535b8d8/CLEAN%20Climate-%20and%20Nature-Positive%20-%20HIFOR\_2023\_11%20refresh.pdf?\_gl=1\*2hudng\*\_ ga\*NzMxNTI3OTEwLjE2OTYzNjE5MjM.\*\_ga\_BTX9HXMYSX\*MTcxNTE5NTMOMy4xNS4wLjE3MTUxOTUzNDMuNjAuMC4w&\_ga=2.172749156.653560768.1715192699-731527910.1696361923&\_ gac=1.263407486.1713967601.CjwKCAjw26KxBhBDEiwAu6KXt2h4AjBFYnjKZMYVypVdaPVopOEoV8UIIQviE0wRh--xDLjwO\_0ubhoCHT0QAvD\_BwE

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