

Tropical Forest Forever Facility (TFFF)

Large-scale financial incentives for tropical forest countries to conserve and increase tropical forest cover



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This concept note synthesizes the current proposal for establishing a new international facility designed to reward Tropical Forest Countries¹ (TFCs) for conserving and expanding their broadleaf moist tropical and subtropical forest cover, delivering benefits for the entire global community. The Tropical Forest Forever Facility (TFFF) is an innovative initiative to raise significant additional funding for the conservation of tropical forests on a permanent basis from public and private sources. The TFFF aims to allocate this funding to TFCs based on performance measured against forest cover through remote sensing technologies. The funds that are allocated are expected to benefit those that effectively conserve the forests on the ground, such as local communities and indigenous people.

The Government of Brazil presented this idea initially at COP 28 in Dubai and expects to launch the TFFF at COP 30 in Brazil, in November 2025. To support the design process, Brazil has established an informal Interim Steering Committee composed of representatives from six TFCs (Brazil along with Colombia, DRC, Ghana, Indonesia, and Malaysia) and six non-TFC potential sponsor countries (France, Germany, Norway, UAE, UK, USA) that have been meeting regularly both virtually and in person.

The preparation of this Concept Note was led by the Ministry of the Environment and Climate Change, the Ministry of Finance, and the Ministry of Foreign Affairs of Brazil. It is based on the inputs from the Interim Steering Committee, which worked in three task forces (i. Financial, ii. Governance, and iii. Eligibility and Monitoring). The Concept Note benefited from comprehensive analytical support from the World Bank, Lion's Head Global Partners, Systemiq, the United Nations Development Program (UNDP), the Organization for Economic Cooperation and Development (OECD), the Wildlife Conservation Society (WCS), Conservation International (CI), World Wildlife Fund (WWF), and Campaign for Nature (CfN), as well as advice from experts, representatives of institutional investors, non-governmental organizations (NGOs), think tanks, and philanthropies. The UK Government and the Rockefeller Brothers Fund (RBF) provided key financial support.

This concept note (2.0) is informed by the valuable feedback received from several stakeholders. While the Government of Brazil attempted to incorporate as much feedback as possible, this concept note remains the responsibility from the Brazilian government. The concept outlines the TFFF design elements to constitute a 'minimum viable product' that allows potential partners to advance their due diligence. Further details on the operationalization of the Facility will continue being discussed in 2025 in close consultation with other partner countries, civil society, and the private sector.

¹ Terms capitalized in this concept note are clarified the first time they are used. They have legal meaning and will be used in TFFF-related legal documents.

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1. Concept Summary

1.1. Introduction

The Tropical Forest Forever Facility (TFFF) is an innovative global permanent fund dedicated to supporting tropical forest conservation over the long-term. It is a global initiative led by the Government of Brazil and designed in close dialogue with 11 other countries to be launched at the COP30 in Belém, Brazil.

The need for such a facility is urgent and clear. The world is facing simultaneous crises: climate change, biodiversity loss, land degradation, threats to indigenous peoples, loss of freshwater, and more. Humanity has already transgressed six of nine planetary boundaries [Richardson et al 2023²] – those processes that are critical for maintaining the stability and resilience of Earth system as a whole – four of which (biosphere integrity, climate change, land systems change, freshwater change) are intimately linked to tropical forests. And the world is moving towards climate tipping points [Armstrong McKay et al. 2022³] where feedback cycles begin to accelerate warming instead of buffering us from our emissions – all of which, including the risk of Amazon rainforest dieback beyond 2°C of warming – become more and more likely when more tropical forest is lost.

Financing the long-term conservation of tropical forests is a critical solution. It can help us reduce the impacts we are already experiencing, back away from climate tipping points, and bring humanity back into the zone of both safe and just planetary boundaries [Rockström et al 2023⁴].

The TFFF does this by providing predictable long-term incentives for standing moist tropical forests, with a significant portion of TFFF funding expected to reach forest stewards on the ground that contribute directly to conserving and restoring forests, including local communities, indigenous people, farmers, protected area managers, and others. The TFFF will complement existing programs focused on maintaining biodiversity, such as the Global Environment Facility (GEF), and those focused on reducing deforestation, such as REDD+ and carbon markets, in particular by providing an incentive to maintain forest cover once deforestation has been controlled and/or national forest cover is increasing – an incentive that is currently missing in the global finance landscape.

And it does it in new and innovative ways (Figure 1). First, by raising money differently: The TFFF does not rely on donor grants, subject to the whims of new regimes or the changing priorities of wealthy countries' budget, but rather by providing a strong value proposition to sponsor investors, generating competitive market returns.

Second, by establishing a self-financing vehicle for the long term: The Tropical Forest Investment Fund (TFFF's investment arm) invests its capital in a diversified fixed income investment portfolio that generates a higher financial return than the Fund's cost of capital.

² Earth beyond six of nine planetary boundaries. Available at: <https://www.science.org/doi/10.1126/sciadv.adh2458>

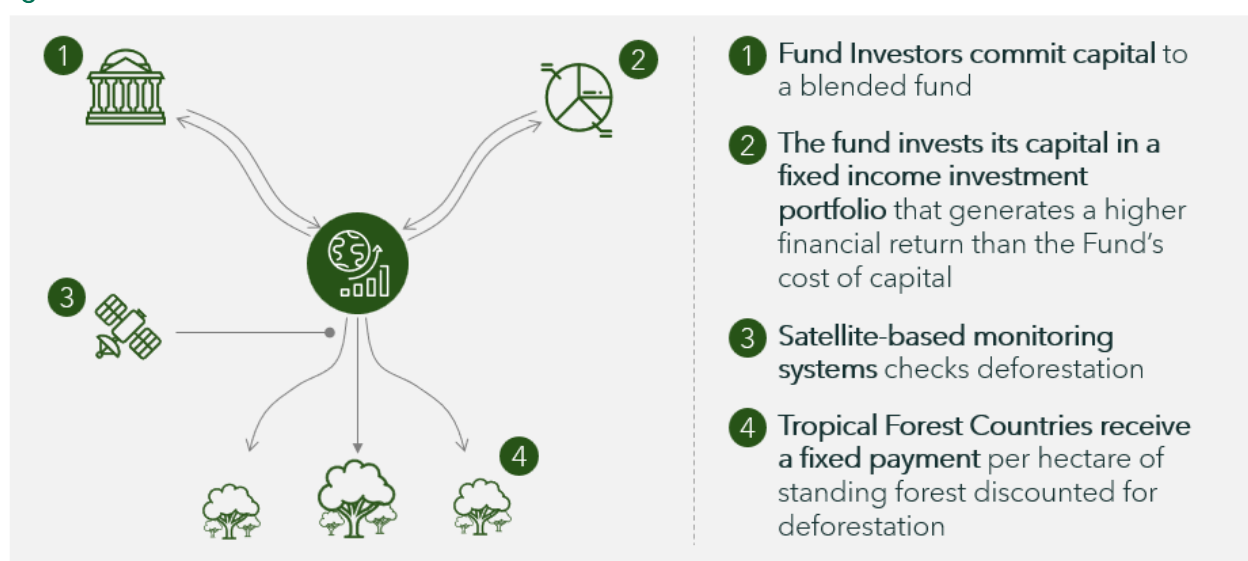
³ Exceeding 1.5°C global warming could trigger multiple climate tipping points. Available at: <https://www.science.org/doi/10.1126/science.abn7950>

⁴ Safe and just Earth system boundaries. Available at: <https://www.nature.com/articles/s41586-023-06083-8>

Third, by monitoring forest change transparently using satellites at low costs: The TFFF invites countries to use their own data or global data that meets stringent transparency and quality criteria.

And fourth, by paying for success at scale and to the right people: The TFFF provides performance-based payments to eligible tropical forest countries (the 70-plus countries that currently host over 1 billion hectares of tropical and subtropical moist broadleaf forests) that maintain and increase their forest cover, at a scale large enough to compete with the alternative land uses driving deforestation. It discounts those payments for every hectare of forest loss, to ensure that only countries truly conserving forests are rewarded. And it will channel a portion of these payments – currently set to 20% – to the indigenous peoples, local communities, and other forest owners and stewards that protect the forest.

Figure 1: TFFF Scheme



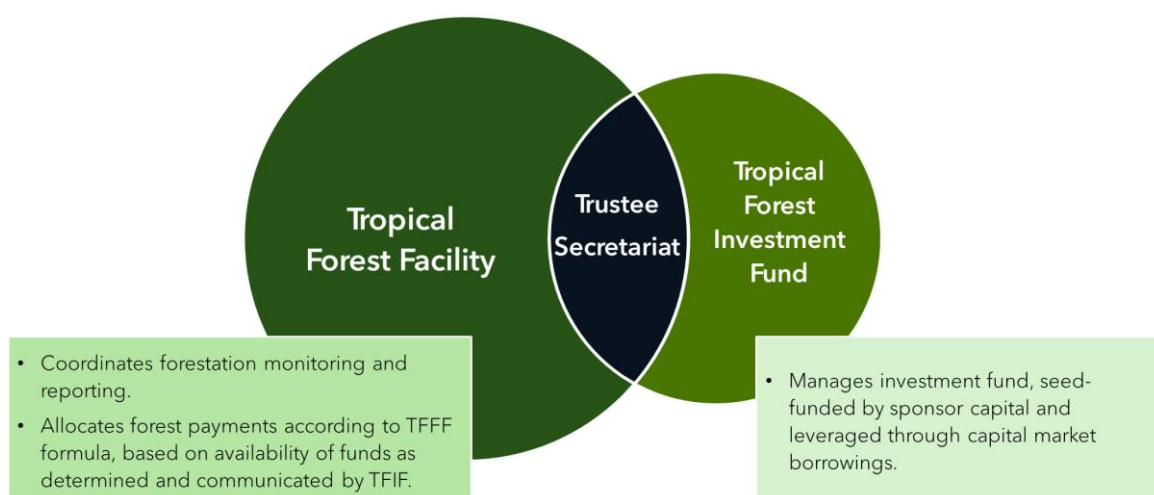
With these innovations, the TFFF will be able to pay Tropical Forest Countries (TFCs) for ecosystem services of global significance, contributing to economic, social, and environmental resilience, climate change mitigation and adaptation, biodiversity conservation and water and food security. It creates a de facto asset out of the currently massively undervalued positive externalities of standing tropical forests.

1.2. How Does the TFFF Work?

The TFFF will be constituted as an umbrella facility with two distinct arms. One arm, the Tropical Forest Investment Fund ("TFIF"), will mobilize and raise financial resources to fund annual payments to participating TFCs who preserve and increase their tropical and sub-tropical forest cover. The other arm, the Tropical Forest Facility ("the Facility") will coordinate how the TFFF's forest cover rewards system works. The TFFF Secretariat ("Secretariat") will coordinate the inter-linkages between both arms. Each arm will have its own trustee to provide financial administrative services. The same financial institution may act as trustee for both arms, but Facility and TFIF trust fund accounts will remain separate to maintain TFIF's independent, ringfenced status.

The two arms of the TFFF are illustrated in Figure 2 below.

Figure 2: TFFF Governance Scheme



The Facility will engage with TFCs interested in participating in the TFFF about their forest monitoring systems and will facilitate those systems' certification for TFFF eligibility purposes. The Facility arm will also gather information from TFCs about their forest cover on an annual basis. The Facility arm of the TFFF will be established as a financial intermediary fund hosted by a multilateral development bank (MDB). As an MDB financial intermediary fund, it will not be an independent legal entity but will have its own board and secretariat.

The TFIF will be a blended finance structure comprising:

- A sponsor tranche funded by long-term loans or guarantees from developed country sovereigns and other investors supporting the TFFF. Investment terms will vary by sponsor but aim for a cost equivalent to the yield of long-dated US Treasury Notes or the equivalent in the sponsor's currency.
- A senior debt tranche of approximately 80% of the TFIF's capital sourced from institutional bond market investors with a targeted cost of capital that is comparable to the cost of MDB senior debt.

The TFIF will be established as an independent investment fund and will engage an MDB to serve as its Treasury and Financial Manager.

1.3. Operations: The Tropical Forest Facility (The Facility)

- The overarching goal of the TFFF is to make annual performance-linked payments (Forest Payments) to participating TFCs to reward them for the conservation of their moist broadleaf forest (hereinafter "Eligible Forest")

- Forest Payments will be fixed annual payments in US dollars and to be made to participating TFCs based on the area of Eligible Forest that is maintained from one year into the next.
- Eligible Forest will be determined annually based on participating TFC's national or third-party forest cover monitoring systems.
- The area of Lost Forests and Degraded Forests will be monitored using satellite-based systems. Data will be sourced using national or global monitoring systems, provided such systems have met the TFFF technical standards.
- Payments due to TFCs will be based on a two-tiered discount formula that reflects the average annual rate of areas of lost forest and degraded forest in the prior three years.
- Payments will be made to the national treasuries or to designated public funds of participating TFCs. Countries will have decision-making authority over the use of the payments of TFFF resources but will commit to allocate a minimum of 20% of the Forest Payments to support Indigenous People and Local Communities (IPL&Cs) that ensure forests remain protected. TFCs are encouraged to allocate the remaining funding to forest stewards, those that directly contribute to keeping forests conserved.

1.4. Financing: The Tropical Forest Investment Fund (TFIF)

- The TFIF will utilize a blended finance structure to leverage sponsor capital 3-4 times via the issuance of bonds on international capital markets.
- The objective of the TFIF is to raise USD 25 billion of sponsor capital and to augment this with the issuance of up to USD 100 billion of senior market debt in capital markets.
- The asset base of the TFIF will be allocated to a group of international asset managers after a competitive selection process to invest in a diversified portfolio of long-dated bonds, primarily from Emerging Markets and Developing Economies (EMDEs), including both TFCs and non-TFC EMDEs. Aligned with its mission, TFIF will prioritize climate-positive investments. The expected yield spread over the cost of capital is between 2.5% and 3.0% per annum.
- The interest income earned on the TFIF's investment portfolio will be used to first service TFIF's senior debt, then pay interest due on its sponsor capital, and lastly to provide the necessary funds to the TFFF to make results-based payments to TFCs. Once sponsors capital is repaid, participating TFCs could choose to keep the TFFF operational, providing continuing incentives, or elect to unwind the structure.
- The TFIF will monitor its leverage ratios and, if breached due to market changes, will adjust funding to the TFFF to preserve long-term financial integrity. If payments are insufficient to cover full Forest Payments, per-hectare payments will be reduced. TFCs may receive catch-up payments if TFIF leverage improves.

Table 1: What the TFFF does or does not do

What the TFFF does or does not do	
The TFFF will...	The TFFF does not...
<ul style="list-style-type: none"> ✓ Create a new asset by attributing a value to forest ecosystem services. ✓ Help sovereign investors and TFCs achieve global climate and development goals. ✓ Link results-based performance in maintaining forests to award payments. ✓ Assess performance using satellite data in accordance with pre-defined criteria for all countries. ✓ Complement other global forest initiatives, including REDD+. ✓ Represent a new substantial investor for debt issued by ODA-eligible countries. ✓ Allow TFCs to use annual payments for national forest programs and to treat the payments as grants as there is no obligation to repay the funds. ✓ Reward forest stewards, particularly Indigenous People and Local Communities, for their critical role in conserving forests. 	<ul style="list-style-type: none"> ✗ Generate carbon or biodiversity credits but will help value ecosystem services. ✗ Finance projects directly. ✗ Determine how TFCs will use the funds awarded to them. ✗ Replace other forest finance initiatives and mechanisms, including REDD+. ✗ Compete with existing grant programs but rather complement them by rewarding results in terms of conserving and restoring tropical forests. ✗ Require sovereign investors to make grants to support the Facility. ✗ Create any financial obligations for TFCs, even in the event of underperformance of the TFFF.

1.5. Process: How is the TFFF Being Designed?

The TFFF is being designed through a robust and collaborative process, involving multiple ministries within the Government of Brazil, civil society, Indigenous Peoples and Local Communities (IP&LCs) and technical partners. The Interim Steering Committee forms the backbone of this process. The members of the Steering Committee are engaging their respective ministries in resource mobilization, refinement of the environmental eligibility criteria, international engagement, and public consultations. This effort is further bolstered by technical work led through task forces focused on governance, eligibility and monitoring, and finance, ensuring all key aspects of the TFFF are addressed with technical expertise and global alignment. Strategic partners, including the World Bank, the UNDP, Lion's Head, and Systemiq provide critical support for assessment of environment eligibility parameters, legal and financial structuring, and resource management.

The next steps for TFFF include finalizing technical, legal, and operational aspects while expanding engagement with sponsor countries, TFCs, CSOs, IP&LCs, and investors through regional consultations and advisory committees. Governance and operational frameworks will advance with charter drafting, legal arrangements, and TFC participation. A targeted capitalization strategy, including investor roadshows from May to November 2025, will drive

private investment. Simultaneously, preparations for COP 30 will accelerate with promotional materials to enhance visibility, positioning TFFF as a transformative solution for launch.

2. The Case for the TFFF: Why Now?

2.1. Tropical Forests' Contribution to Ecosystem Services

Tropical forests provide a myriad of ecosystem services that are vital to human well-being and the economy, but they are being lost at an alarmingly fast rate. As seen in Figure 3(a), there are more than 1 billion hectares of non-plantation tropical and subtropical moist broadleaf forest biome across TFFF-eligible countries. Too much of that is being lost by any measure, as seen in Figure 3(b), around 8-9 million hectares of tree cover loss average per year in Global Forest Watch, and about 4 million hectares of forest loss per year from the JRC Tropical Moist Forest dataset. The world is significantly off-track in achieving the 2030 forest goal agreed in Glasgow in 2021.⁵ If this trend continues, it will be impossible to meet the objectives of the Paris Agreement or the Global Biodiversity Framework.

Box 1: Forests provide ecosystem services at different levels

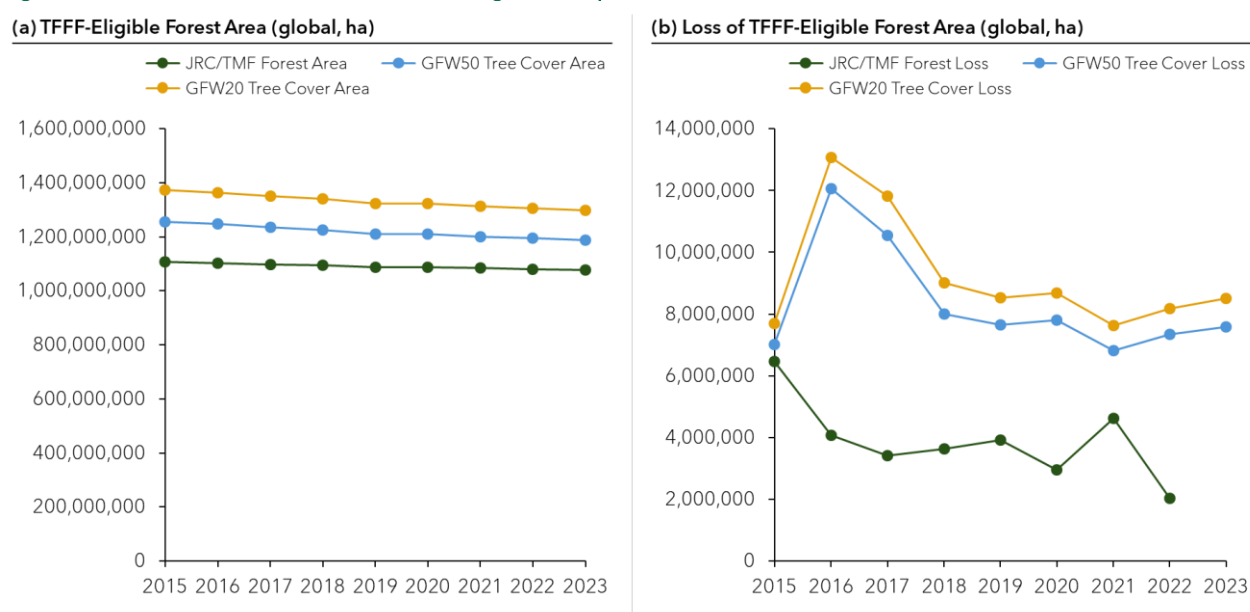
The 2024 G20 Leaders Declaration recognized that “forests provide crucial ecosystem services, as well as for climate purposes acting as carbon sinks” and stressed “the importance of scaling up efforts to protect, conserve and sustainably manage forest and combat deforestation”. The G20 also acknowledge the TFFF as “an innovative tool for forest conservation”. Forests also provide water flow regulation services which underpins agriculture by driving about half of the world’s rainfall; protect downstream areas from floods; filter pollutants from water and air, improving their quality; provide timber and non-timber forest products as well as food; store biological diversity of high value to pharmaceutical and other industries; support pollination and pest control; provide cultural services, particularly to indigenous people and local communities; and provide recreational services. As stressed in the 2024 G20 paper on ecosystem services, a significant portion of these ecosystem services benefit the whole global community, such as global climate regulation, but are not paid for, even though countries providing them face high costs to provide these services, including the opportunity costs of not converting forests into other land uses such as agriculture and livestock, and the implementation costs for conserving forests such as the costs of managing protected areas, fighting fires and promoting the livelihoods of those communities that depend on forests.

2.2. Drivers of Forest Loss

The drivers of tropical forests loss vary from country to country, but they have a common cause – tropical forests are undervalued as the ecosystem services they provide often do not have assigned market value, hence, conservation of standing forests is perceived less favorably from an economic perspective than other land uses such as agriculture, mining, and infrastructure development. This is a key market failure driving global deforestation, large-scale biodiversity loss and changes in regional hydrological patterns with implications for agriculture, livestock and other sectors, and ultimate impact on global food security.

⁵ Glasgow Leaders' Declaration on Forests and Land Use
<https://collections.unu.edu/eserv/UNU:8669/COP26ForestGovernance.pdf>

Figure 3: Forest Area and Loss in TFFF-Eligible Tropical Countries



Source: Global Forest Watch, JRC Tropical Moist Forest data, and TFFF Task Force Analysis

2.3. Valuing Tropical Forests Through Payment For Ecosystem Services

Valuing and compensating the ecosystem services tropical forests provide to the global community, national economies, and local peoples is essential to reversing this status quo. Efforts to pay for the ecosystem services provided by forests must be scaled up rapidly, as noted by the 2024 G20 Environment Ministerial Declaration, which stated that “We [G20 Ministers of Environment] recognize the importance of promoting payments for ecosystem services schemes and programs at a large scale, (...) and providing fair and equitable benefits to the individuals and communities that contribute to the provision of these services, including local communities and Indigenous Peoples, as applicable”.⁶

2.4. The Forest Financing Landscape

In the last couple of decades, the financing landscape for the protection and restoration of forests has grown and become more diverse. It encompasses a menu of finance options that include carbon markets, philanthropy, bilateral and multilateral funding initiatives, results-based mechanisms such as Reducing Emissions from Deforestation and Forest Degradation (REDD+), Payments for Ecosystem Services, as well as targeted fiscal transfers, subsidies and regulations – such as those aimed to govern supply-chains associated with deforestation. Despite certain progress, a major gap remains. Recent assessments show that to meet climate, biodiversity, and land restoration targets, annual financial flows would need to reach over USD 450 billion per year by 2050.⁷ This requires a quantum increase in existing funding streams, which is impossible without additional financing mechanisms. Moreover, as indicated in Figure 4, most of the currently

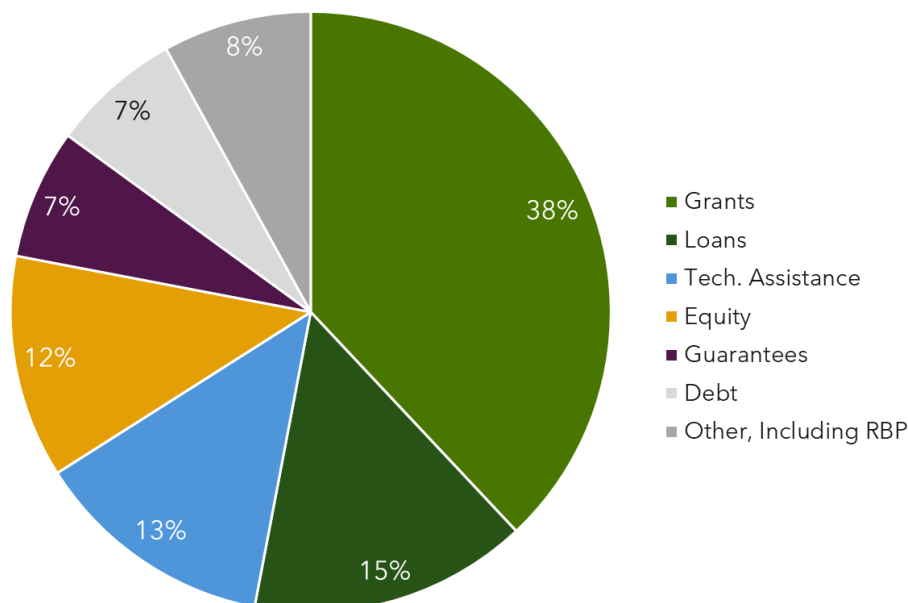
⁶ Brazil. Ministry of Environment and Climate Change. Environment and climate sustainability: technical papers on adaptation finance, oceans, payment for ecosystem services and waste and circular economy – Brasília: MMA, 2024.

⁷ 2023 Forest Declaration Assessment. Chapter 3: Finance for Forests. Available at: [Finance for forests: Theme 3 Assessment](#).

available forest finance comes from bilateral and philanthropic grants, which lack scale and predictability.

Figure 4: Finance for Forests by Type

Finance for Forests by Type (% of total finance)



Source: Forest Finance Landscape and the Potential for Just Investments, Maria Brockhaus; University of Helsinki

2.5. Challenges in Accessing Financing

In addition to the overall scarcity of forest finance, accessing international resources to conserve tropical forests is often challenging and characterized by delays in disbursement due to procedural complexity, conditional requirements, and fragmented approaches. These impediments undermine the timely and effective deployment of funds, hindering the urgent action needed to address deforestation, and making it more difficult to induce positive change at scale. Carbon markets have the potential to fill this gap, but their scale is uncertain, and they are not geared towards rewarding countries that protect intact forests. Instead, they focus on reducing deforestation or restoring forests in areas that have been deforested.

2.6. The Need for Large-Scale Results-Based Payments for Standing Forests

Forest financing hurdles are especially problematic given that most TFCs lack the fiscal space to finance the policies and activities needed to maintain their standing forest areas. In addition, available forest funding mechanisms are not fit for purpose to support large-scale forest conservation efforts because they are often channeled through traditional input-focused approaches. In other words, they mostly focus on specific activities or "inputs," such as planting trees, monitoring illegal logging, or enforcing environmental laws. These efforts, while valuable by themselves, are not comprehensive and agile enough to address complex and rapidly changing drivers of deforestation in an effective, timely and scalable manner. A transparent, results-based, large-scale financing mechanism is thus required to reward those who take

concrete and successful steps to keep their forests standing. Simultaneously, such flexibility should enable the TFC governments to use the full set of their macro, fiscal and sector-specific tools and interventions to shape actions on the ground, particularly to provide predictable incentives to forest stewards – actors on the ground that lead the charge in maintaining the forests. Fortunately, forests are particularly favorable to results-based funding approaches, as recent advances in satellite monitoring technology make results measurement straightforward, transparent, and consistent, compared to other sectors where there may be less agreement on outcomes and performance measures, and where assessing outcomes would require expensive on-the-ground surveys.

2.7. Complementing Existing Tropical Forest Financing Instruments

As a large-scale, results-based mechanism, the TFFF will complement the existing instruments for forest finance, generating a new and additional source of funding. Importantly, if existing efforts to reduce deforestation succeed, payments under many of the existing mechanisms such as REDD+ will decline, further emphasizing the importance of establishing a permanent financing mechanism to support standing forests, both to maintain existing tropical forest cover and to incentivize its expansion. The TFFF is a bold proposal designed to address this challenge. By valuing standing and restored tropical forests, it will mitigate a market failure by giving a value and paying for the ecosystem services provided by forests.

3. Core Principles

The TFFF is founded on the principles of simplicity and pragmatism and the necessity and importance of incrementalism, i.e. the necessity and importance of rewarding steady but gradual incremental change.

3.1. TFFF Core Principles

TFFF core principles include:

1. *Simplicity and readiness*

- The TFFF operations seek to remain technically simple so that the Facility can be readily deployable. This means using existing technologies, institutions, and policies as much as possible instead of relying on new technologies, institutions and policies yet to be designed.

2. *Objective Decision-making*

- The organizational structure of the TFFF, and its management and operation, will be based on objective rules-based criteria and processes designed to promote efficiency and manage conflicts of interest.

3. *Full Transparency*

- All TFFF-related accounting, auditing and financial reporting will be fully transparent and consistent with internationally accepted accounting principles, pertinent regulation and best practice among other multilateral financial institutions.

4. *Use of Country Systems*

- Participating TFCs will rely on their own data and currently existing national systems for monitoring and recording Standing Forest and Fully Restored Eligible Tropical Forest Cover *provided* such systems meet the criteria for qualifying country systems for monitoring and recording Standing and Fully Restored Eligible Tropical Forest as determined in accordance with the process set out in the TFFF's governance documents. TFCs that do not have such a system may use a third-party system that complies with such criteria.

5. *Results-Based Payments*

- All Forest Payments made to a TFC will be based on the number of hectares of Standing and Fully Restored Eligible Tropical Forest Cover the TFC reports to the Secretariat of the Facility, adjusted according to the availability of TFIF resources for Forest Payments, as determined by the Board of the TFIF, and the number of TFCs entitled to receive a Forest Payment, in the year the Forest Payment is made, as determined by the Board of the Facility upon the recommendation of the Secretariat of the Facility.

6. *Public Disclosure*

- TFCs will disclose their data, monitoring, recording and reporting of their Standing and Fully Restored Eligible Tropical Forest Cover to the Secretariat of the Facility and publicly, in an accessible, user-friendly manner.
- The Secretariat of the Facility will publicly disclose all Forest Payments made to TFCs.
- The Secretariat of the Facility will disclose the Annual Forest Reports submitted by TFCs.

7. *Sovereign Decision Making.*

- TFCs receiving Forest Payments from the TFFF will have the discretion to use such payments as they see fit, subject to the TFFF principles and governance documents.

8. *Revenue Sharing with Indigenous People and Local Communities*

- TFCs will direct an agreed minimum percentage of Forest Payments to the Indigenous Peoples and Local Communities (IP&LCs), who ensure that the forests remain intact on the ground where the Standing and/or Fully Restored Eligible Tropical Forest grow.
- The agreed minimum referred to in this Principle will be set in the Charter of the Facility. The current proposal is a minimum of 20%.
- TFCs may make funds available to IP&LCs directly or through a localized funding mechanism.
- TFCs will publicly disclose their compliance with this principle in an accessible and user-friendly manner.

9. Accountability

- TFFF accountability for the impact of its operations on external stakeholders at the local and at the global level will be facilitated by the TFFF's Grievance Redress Mechanism.

10. Relevance and incremental improvement

- At all times, the Facility will ensure that the Facility's operations align with developments in forest monitoring technology and assessment and advances in institutions and policies. The Facility will improve over time through learning.

3.2. Additional Core Principles: TFIF

As the TFFF's financing arm, the TFIF includes certain additional core principles relevant to its specific functions as follows:

1. Financial Sustainability and Protection of Capital

- The TFIF will be managed to ensure the TFIF's financial sustainability for its mission, primarily the protection of the TFIF's capital, while generating its target financial return on a risk-adjusted basis.

2. Diversification

- The capital assets of the TFIF will be invested in a fixed income portfolio of assets from a geographically diversified range of emerging market economies. To the extent possible investments will favor instruments that support the global climate transition.

3. Best Practice

- The TFIF's portfolio composition and asset allocation will be guided by the TFIF's Investment Policy Statement, and TFIF's financing strategy will be guided by the TFIF's Capital Adequacy Policy, which policies will be approved by the Facility's Board of Directors.
- The structure of the TFIF Investment Policy Statement will be consistent with accepted best practice in long-horizon public investment portfolios.
- The structure of the TFIF Capital Adequacy Policy will be consistent with accepted best practice in debt-funded international financial institutions.
- The TFIF Investment Policy Statement, together with the TFIF Capital Adequacy Policy, will be framed and implemented in a manner that assures public and private providers of capital in support of the TFIF that the financial stability of the Fund is maintained.

4. TFFF Eligibility and Monitoring

4.1. Overview

Determination of a country's eligibility to participate in the TFFF as a TFC that may receive payments for its conservation and increase of its tropical and/or sub-tropical forest cover is a multi-

step filtering process. Countries interested in participating must satisfy a set of Eligibility Criteria agreed by the Board of Directors of the Facility and reflected in an annex to the Facility's Charter. Those criteria include geographic and economic criteria in addition to technical criteria. With respect to technical criteria, the use of country systems is a core principle of the TFFF. At the same time, to ensure integrity in the TFFF's program and operation, the Eligibility Criteria will include certain technical specifications applicable to countries' forest cover monitoring systems.

TFCs interested in participating in the TFFF will provide information on their national forest monitoring systems to the Secretariat who will send such information to a third party for verification that the system meets the technical specifications in the TFFF's Eligibility Criteria. TFCs who do not have their own forest cover monitoring system, or a system that complies with the TFFF's Eligibility Criteria, may use a third-party system, verified to the Secretariat by a third party engaged by the Secretariat for that purpose. Once a TFC begins participating in the TFFF, the compliance of the forest monitoring system the TFC is using with the TFFF Eligibility Criteria will be reassessed every [3-5] years.

Throughout the TFC's participation, the TFC will send an annual report on its forest cover to the Secretariat. The TFC's eligibility to receive a Forest Payment from the TFFF will be based on the information provided in such annual reports. Actual receipt of a Forest Payment each year will depend on the availability of funds from the TFIF, as determined by the Board of Directors of the TFIF.

4.2. Potentially Eligible TFCs

Potentially Eligible TFCs comprise countries that lie within the limits of tropical and subtropical moist broadleaf forests biomes, as identified in Dinerstein et al. (2017)⁸. TFCs will determine the exact boundaries of the eligible biomes within their borders, in accordance with a pre-agreed methodology set out in the TFFF Eligibility Criteria and submit them to the Secretariat as part of the process of their formalizing their interest in participating in the TFFF (accession process). The list of potentially TFFF-eligible countries excludes high income countries using the UNCTAD classification⁹ (12 countries based on the 2023 data).

Table 2: TFFF Eligible Countries

Angola	Antigua & Barbuda	Argentina	Bangladesh
Belize	Benin	Bhutan	Bolivia
Brazil	Burma	Burundi	Cambodia
Cameroon	Central African Rep	China	Colombia
Congo	Dem Rep of the	Congo, Rep of the	Costa Rica
Cuba	Dominica	Dominican Republic	Ecuador

⁸ Dinerstein et al. (2017). An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm. <https://doi.org/10.1093/biosci/bix014>

⁹ As defined by UNCTAD at <https://hbs.unctad.org/classifications>.

El Salvador	Equatorial Guinea	Ethiopia	Fiji
Gabon	Ghana	Guatemala	Guinea
Guyana	Haiti	Honduras	India
Indonesia	Jamaica	Kenya	Laos
Liberia	Madagascar	Malaysia	Mauritius
Mexico	Mozambique	Nepal	Nicaragua
Nigeria	Palau	Panama	Papua New Guinea
Paraguay	Peru	Philippines	Rwanda
Sao Tome & Principe	Sierra Leone	Solomon Is	Somalia
South Africa	South Sudan	Sri Lanka	Suriname
Swaziland	Tanzania	Thailand	Togo
Trinidad & Tobago	Uganda	Vanuatu	Venezuela
Vietnam			

4.3. Requirements to Participate in the TFFF (Accession Requirements)

Potentially Eligible TFCs interested in participating in the TFFF must meet the following requirements:

- The TFC's Deforestation (as calculated by a system certified as compliant with the Eligibility Criteria, and within the TFFF eligibility area) in the year that the TFC plans to join the TFFF (by signing a participation arrangement), determined based on the rolling average of the three years, must: a) be below 0.50%; and b) exhibit a decreasing trend in the year of assession, as compared to the previous year. TFCs will submit the required information on deforestation to the TFFF Secretariat.
- Use a transparent, standardized, and reliable method for measuring tropical forest cover, which could be the TFC's national system, if it meets the TFFF's Eligibility Criteria, or that of a third-party if the third-party system meets the Eligibility Criteria.
- Confirm to the Secretariat that it has transparent public financial management mechanisms to receive and allocate Forest Payments based on the TFCs' programming.
- Commit to allocate a minimum of 20% of Forest Payments to IP&LCs.
- Disclose a list of national programs and policies expected to be financed by Forest Payments. TFCs are encouraged to allocate a portion of their Forest Payments to forest stewards.
- Demonstrate that Forest Payments will be additional to their national budget and not replace existing budget allocations.

- Submit to the Secretariat the exact borders of the proposed eligible biomes (tropical and subtropical moist broadleaf forest, with the option to expand to include areas of mangrove forest that are adjacent to these areas).

4.4. Additional Post-Accession Requirements

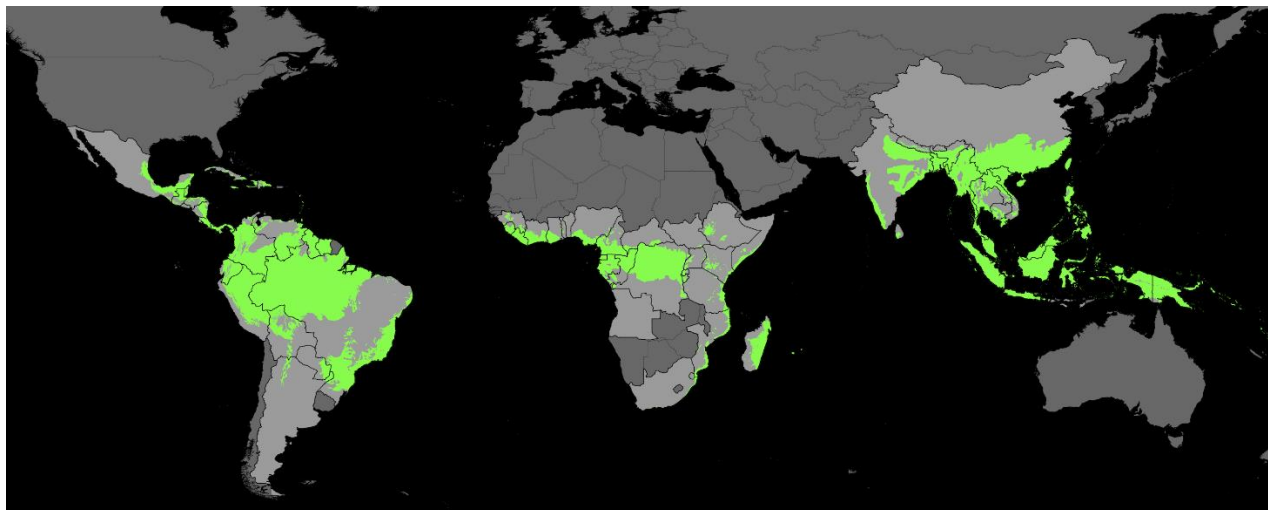
Once a potentially eligible TFC establishes its compliance with the TFFF's Eligibility Criteria, and formalizes its participation in the TFFF, it becomes eligible to receive Forest Payments.

In addition to maintaining their adherence to the initial requirements for eligibility, participating TFCs are expected to meet the following requirements to be eligible to receive a Forest Payment:

- The TFC's annual deforestation rate of TFFF-eligible tropical forests should remain the same or decrease on a year-over-year basis, based on remaining forest in the previous year. An ad hoc increase of [proposed 0.1%] would be allowed for certain pre-agreed force-majeure circumstances, such as large-scale natural disturbances, i.e. cyclones, hurricanes, earthquakes and other extreme natural events beyond human control.
- In the years when a TFC is unable to meet these requirements, it will not be eligible to receive a Forest Payment. It is proposed that in case of a multi-year [2+] noncompliance, Forest Payments will be suspended for a minimum of three years, with the TFC's deforestation rate at re-entry being capped at the rate of deforestation at the time of the TFC's initial participation in the TFFF.

4.5. Why Use Biomes?

Figure 5: Original area covered by Tropical & Subtropical Moist Broadleaf Forests¹⁰



TFFF-eligible countries (light grey) and eligible biome areas within these countries (green), including tropical and subtropical moist broadleaf forest biome and adjacent mangrove areas. Analysis by Eligibility and Monitoring Task Force using data from *ecoregions.appspot.com* and *Dinerstein et al (2017)*.

¹⁰ <https://ecoregions.world/>

The approach of using a biome to define eligibility area, and monitoring the full areal extent of covered biome(s), rather than monitoring “forest area” as defined by national forest maps and/or satellite-derived tree cover maps, has the benefits of:

- Using a science-based and broadly accepted classification system of terrestrial biomes that is tightly linked to the provisioning of ecosystem services of interest to the TFFF, such as carbon density, biodiversity, water, local climate regulation, etc.;
- Providing a consistent framework for all participating TFCs, serving as the common lens through which the TFFF defines and focuses on “tropical forests”;
- Avoiding zero-sum gaming and potential perverse incentives that could result from participating TFCs proposing their own coverage areas;
- Enabling alignment between the broad initial coverage area of the TFFF, and the use of national forest definitions and national monitoring systems for evaluation of forest cover within those areas;
- Ensuring that restoration of natural forests will be captured within a fixed monitoring area;
- Rewarding tropical natural forest cover conservation across all protection, tenure, and governance statuses without bias;
- Allowing the use of a single and consistent map for monitoring which would be fixed through time, irrespective of tree cover changes and/or the drivers of such changes within the coverage area, adhering to the TFFF core principle of simplicity;
- Ensuring clarity and alignment, considering that the TFFF proposes to include only forests within the tropical and subtropical moist broadleaf forest biome, while excluding those in the tropical and subtropical dry broadleaf forest and tropical and subtropical coniferous forest biomes, as well as forests within the tropical and subtropical grasslands, savannas and shrublands biome, all of which might otherwise be considered “forests” or even “tropical forests” by national forest monitoring systems. This proposed TFFF eligibility area would exclude many important and valuable forests around the tropics. However, it is necessary for several reasons: (a) to focus attention on those forests providing the highest level of ecosystem services; (b) to ensure that per-hectare TFFF payments are large enough to provide actionable incentives; (c) to maintain a high degree of comparability across the TFFF coverage area in terms of biophysical forest properties and drivers of tree cover change; and (d) to allow for simpler monitoring criteria; and
- Including eligible areas such as mangrove biomes that are contiguous with tropical and subtropical moist forests.

5. Forest Cover Measurement & Monitoring System

5.1. Satellite Monitoring

The TFFF requires reliable, transparent, and comparable systems for measuring native/natural forest cover across participating TFCs to assess eligibility and performance, and to link payments to performance. It is a core principle of the TFFF that these systems, critical for assessing eligibility

and performance, must rely on satellite-based monitoring to ensure that forest cover is accurately reported and verifiable.

TFFF seeks to provide a fair and transparent approach to forest measurement that aligns as much as possible with the unique contexts of participating TFCs. The measurement and monitoring system must balance the need for a fair and transparent approach across TFCs, on the one hand, with the benefits of aligning with the unique contexts of participating TFCs and minimizing additional monitoring and analysis burdens, on the other.

Reforested areas (actively or passively established native/natural forests where forests have historically been) would be included, but tree plantations (monocultures or extremely low-diversity, low-complexity forests planted for agriculture, timber, and/or pulp production) and afforested areas (forests established where forests have not been historically or are ecologically inappropriate) would not be considered for the purpose of determining eligibility for a Forest Payment from the TFFF.

5.2. Monitoring Specifications

It is proposed that the TFFF:

- Require **annual** forest cover reporting that has a minimum mapping unit of 1 ha (100x100m) and that meets global transparency and validation standards. Participating TFCs are required to submit an annual forest cover report ("Forest Cover Report") based on monitoring systems that have been certified as technically acceptable under the Eligibility Criteria. This annual reporting frequency supports timely assessments of changes in forest cover, ensuring that the TFFF keeps accurate and up-to-date records of the forest situation in each participating TFC.
- Encourage the use of data and analysis generated by **national forest cover monitoring systems** that meet TFFF global technical standards, as set out in the Eligibility Criteria, whilst allowing TFCs that do not have such systems to use third-party systems that meet TFFF's Eligibility Criteria, for generating the Forest Cover Report. This flexibility enables TFCs to leverage existing resources while maintaining TFFF's standards for data accuracy and consistency.
- Require **underlying satellite data** to be optical (2D) imagery with **spatial resolution of at least 30m**, with a minimum of four bands, and a minimum temporal frequency of at least 1 year. Such requirements would be set out in the Eligibility Criteria.
- Consider **canopy cover** as the primary remotely sensed variable for identifying TFFF eligible forest cover (Eligible Forest Cover), and areas with more than **20% tree canopy cover** as eligible for Forest Payments (with TFCs permitted to propose higher canopy cover thresholds, but not lower), and areas below this threshold to be ineligible for Forest Payments. Such requirements would be set out in the Eligibility Criteria.
- Allow for areas observed with **10% or less of cloud cover** in underlying satellite data to be included as Eligible Forest Cover in the calculation of eligibility for Forest Payments (with later adjustments as needed) and consider alternative satellite products that might be used to calculate Eligible Forest Cover in areas with consistently higher cloud or shadow coverage.

All monitoring systems used by participating TFCs must meet TFFF's global technical standards, as set out in the eligibility criteria. The process and procedures for evaluating national systems and a list of approved third-party alternatives will be included in a TFFF Operations Manual.

6. Deforestation and Degradation Rates

6.1. Setting Deforestation Rates

The deforestation rate of a participating TFC will be assessed based on the percentage of forest cover lost annually, calculated using the standing forest from the previous year within the coverage area, as estimated by one of the approved monitoring systems. A tiered discount for each deforested/degraded hectare will be implemented (see Performance Discount below). In future revisions of the TFFF's technical parameters [after 3 years], a ratcheting-down mechanism for deforestation rates will be considered to encourage continuous improvement in forest conservation.

It is important to clarify that the deforestation rate at entry of any participating TFC is its cap. The only exception would be in case of unforeseen circumstances beyond the control of the country, such as natural disasters.

To inform the proposed multi-tiered approach, we analyzed the current global situation of tropical and subtropical moist broadleaf forest biomes using several alternative datasets: the latest global tree cover data made available by Global Forest Watch¹¹ analyzed at 20% and 50% canopy cover thresholds, and the Tropical Moist Forest (TMF) dataset made available by Europe's JRC (Table 3), as well as selected national data. These datasets, which provide global or pan-tropical coverage, both allow for the segregation of biome areas and exclusion of plantations.

Over the past five years, the estimated deforestation rate in GFW dataset was averaged 0.63% and 0.62% respectively for the last five years of reliable data. Deforestation rates in the JRC/TMF data are about half that – averaging 0.31% in the four most recent years, excluding 2023. Based on the preliminary analysis - deforestation data expected to be submitted by TFCs (and assessed based on the Eligibility Criteria) will fall within the range between GFW and JRC/TMF databases.

Table 3: Estimated forested area and deforestation rate in the tropical and subtropical moist broadleaf forest biome in developing countries based on Global Forest Watch and JRC/TMF data.

Year	Total forested (ha)	Total deforested (ha)	Deforestation rate
JRC/TMF Data			
2019	1,091,128,485	3,906,643	0.36%
2020	1,087,221,842	2,962,191	0.27%
2021	1,084,259,651	4,609,221	0.43%

¹¹ The use of Global Forest Watch data for this modelling does not imply that this is the source of data to be used during the TFFF operation. The data to be used for eligibility at entry and for determining annual payments will be those obtained through the accepted monitoring systems indicated by each country.

Year	Total forested (ha)	Total deforested (ha)	Deforestation rate
2022	1,079,650,430	2,034,132	0.19%
2023	1,077,616,298		
GFW20 Data			
2019	1,330,657,493	8,519,698	0.64%
2020	1,322,137,788	8,680,522	0.66%
2021	1,313,457,278	7,634,141	0.58%
2022	1,305,823,130	8,172,802	0.63%
2023	1,297,650,309	8,515,670	0.66%
GFW50 Data			
2019	1,216,838,212	7,644,115	0.63%
2020	1,209,194,091	7,801,410	0.65%
2021	1,201,392,691	6,818,402	0.57%
2022	1,194,574,283	7,347,349	0.62%
2023	1,187,226,917	7,586,450	0.64%

6.2. Identifying Degraded Forests

Degraded Forest refers to areas still identified as “forest” by a forest cover monitoring system, but significantly impacted by human activities, thus providing lower levels of TFFF-targeted ecosystem services than healthy forests. Although several human-induced actions can lead to forest degradation, TFFF proposes using fire-damaged forests as a proxy for Degraded Forests. This choice is based on the following considerations:

- Rainforests are not susceptible to natural fire (e.g., from lightning), hence most if not all fires are started by humans.
- Fires are pervasive, occurring in every region and usually affecting large areas.
- Fires typically do not burn the tallest trees but cause significant damage to smaller trees and the understory, which is characteristic of a degraded forest state.
- Burn scars and related degraded forests can be identified using satellite images, but overlaying the area burned with regions still identified as forest by forest cover monitoring systems. Thus, the identification and monitoring of degraded forests can be included in the country’s forest cover monitoring system.

One important issue to consider is the long-term identification of degraded forests. Under the current proposal, the area of degraded forest for the purpose of applying the discount, would be

considered in the year that the fire occurred. However, since the area still meets the "forest" criteria defined by monitoring systems, it should continue to be classified as degraded forest until it transitions to either deforested or regenerated forest.

6.3. Performance Discounts

The TFFF financial proposal is for each eligible TFC to receive a fixed amount in US dollars for each hectare of standing natural forest as identified by the forest cover monitoring system being used by the TFC, provided such system meets the eligibility criteria. At present, the proposal is to pay USD 4 per hectare. To address concerns about continued deforestation and degradation, the TFFF further proposes applying a tiered discount to the area considered for calculating the Forest Payment based on deforested and degraded Forest area. This measure is designed to ensure that only healthy forests, which provide a wide range of environmental services, are included in the calculations of allocable Forest Payments. Additionally, it serves as an incentive for countries to reduce deforestation and degradation within their territories.

The proposed tiered discount system will be applied based on deforestation rates as follows:

- Countries with an annual deforestation rate of 0.3% or lower will receive a 1:100 discount. In other words, for every hectare deforested, 100 times the hectare will be deducted from the payment.
- For countries with an annual deforestation rate between 0.3% and 0.5% a 1:100 discount will be applied up to the area of loss equivalent to 0.3%, and above that rate up to 0.5% a 1:200 discount will apply, deducting 200 times each hectare deforested.
- The discount for degraded forest is proposed to be 25:1. Areas that have been classified as degraded will be re-classified as forest if they are allowed to regrow for a period of [10 years].
- If a section of the forest that was degraded in a prior year and incurred a 25:1 discount is subsequently deforested, an additional deforestation discount ratio of 75:1 is proposed.

For example:

- If a participating TFC has 200 million hectares of tropical moist broadleaf forest and recorded an annual deforestation of 500,000 for the prior three years, it would be eligible to receive payments for 150 million hectares [200 million - (100 * 500,000)].
- If a different participating TFC has 200 million hectares of tropical moist broadleaf forest and recorded an annual average of 800,000 hectares of deforestation for the prior three years, it would be eligible to receive payments for 100 million hectares [200 million - (100*600,000) - (200*.200,000)].
- If a country degraded 1 million hectares but the canopy cover was such that it still qualified as forest, it would be eligible to receive payment for 175 million hectares [200 million - (25*1 million)].

NB: Proposed parameters and discounts will continue being reviewed by the TFFF Eligibility Task Force as additional national data is collected using a forest cover methodology that meets TFFF technical criteria. The results will be updated in Concept Note 3.0.

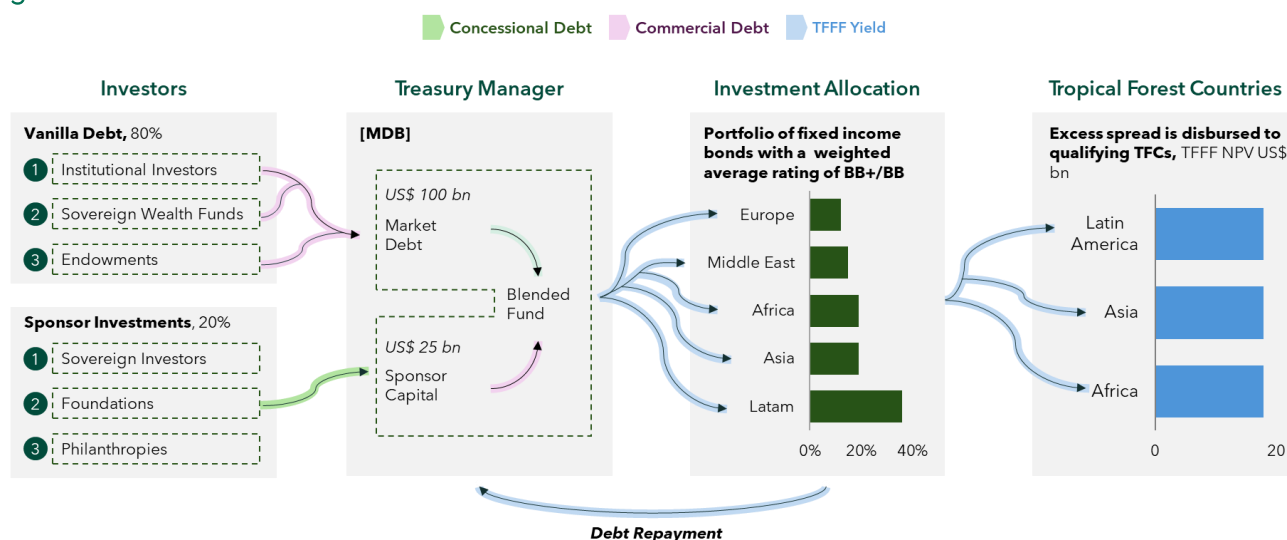
7. TFFF Finances

7.1. The Tropical Forest Investment Fund (TFIF)

TFIF's role is to generate the annual financing flows to reward TFCs for conserving their forest assets. TFIF has an innovative structure that combines sponsor capital with capital raised from institutional investors via market borrowing. High income sovereign and other non-sovereign sponsors (e.g., philanthropies) (hereinafter "TFIF Sponsors"), would provide 20% or more of TFIF's funding as long-term loans, guarantees and/or outright grants, at a target cost not to exceed the long-term borrowing rate of the US Treasury Market. TFIF Sponsors' funding would be repaid over a 40-year period. The remainder of TFIF's funding (80% or less) would be raised in the debt capital markets by issuing liquid, highly rated, long-term bonds for purchase by institutional and retail investors (hereinafter "Market Investors").

TFIF will invest the capital raised into liquid public market bonds. TFIF will invest a significant part of its portfolio in assets from countries that are classified as Official Development Assistance (ODA) eligible by the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD). It is anticipated that TFIF will build a portfolio of such assets combining both sovereign and large corporate issuance.

Figure 6: TFIF Finance Structure



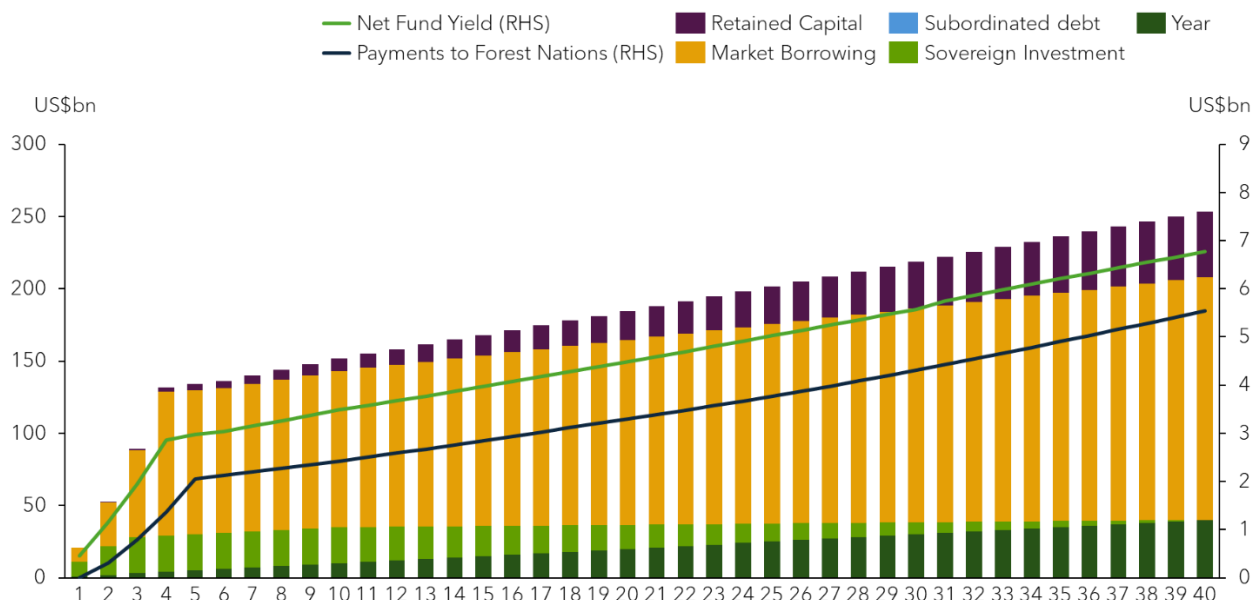
The difference between the weighted average cost of TFIF's funding and the return on its investment portfolio will fund the annual results-based grant payments, the Forest Payments, to qualifying TFCs.

As an example, the current yield of a representative USD-denominated portfolio of bonds from ODA-eligible countries with an average rating of BB+ and a maturity of 10+ years is 7.6%.¹² If TFIF's average cost of capital is 4.90%, the positive spread available for payment to TFCs would be 2.70%. In this example a USD 125 billion fund would generate USD 3.4 billion per year, on

¹² Yield of JP Morgan EMBI portfolio (07/01/2024).

average, of cashflow that would be available to TFCs. With approximately 1 billion hectares of eligible forest, and current levels of deforestation the TFFF could currently make a payment of USD 4 per hectare rising with US CPI inflation (capped at 2% pa).

Figure 7: Projected Potential TFFF Cashflows



As TFIF is an investment fund, its returns cannot be guaranteed. There are two key drivers of fund economics: the net spread between the asset yield and the cost of TFIF's liabilities, and the market-to-market valuation of the portfolio. By buying long-dated assets, TFIF will secure a predictable income, but it is subject to reinvestment risk and mark-to-market volatility on its asset portfolio. If the market value drops below certain key thresholds, it may be necessary to reduce the rate of payout to TFCs. However, historical precedent and underlying financial modelling show that this would only occur in exceptional circumstances and that if such an event were to occur, catch-up payments could be made to TFCs once market yields normalize.

7.2. TFIF Investment Strategy

It is proposed that the currency of operation for the TFIF will be USD, as this is the currency with the greatest set of investment options in ODA-eligible countries. This will not preclude investment into eligible country assets denominated in alternative currencies, but these will be hedged to USD. To enable efficient hedging it is proposed that the investment currencies of the TFIF will be limited to those currencies represented in the Special Drawing Rights (SDR) of the International Monetary Fund (IMF).

It is proposed that TFIF adopt a prioritized investment strategy.

- To the extent possible it will seek to invest in the climate and sustainability-related investments in ODA-eligible countries (e.g., green or blue or sustainable bonds). This portion of the portfolio would aim to qualify under the New Collective Quantified Goal (NCQG) criteria.¹³

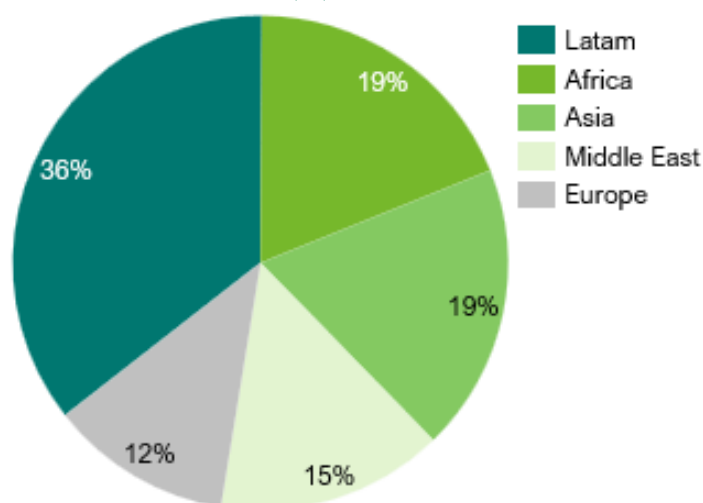
¹³ Subject to confirmation once the NCQG methodology and criteria are determined. In 2023 JP Morgan launched an indicative benchmark via the JP Morgan ESG EMBI Global Diversified Index, which complements the longstanding JP Morgan EMBI Index.

- Secondly the fund will prioritize investments in ODA-eligible vanilla sovereign and corporate debt, excluding any investments that are on a negative list (to be agreed).
- Finally, a maximum of [25%] of the fund will be invested into fixed-income instruments issued by non-ODA eligible countries.

TFIF would seek to hedge all its assets to USD. However, it would also implement an asset-liability strategy to mitigate foreign-exchange risk. Where assets and liabilities have matching currencies, a cross-currency hedge is not required for the full notional, rather just the spread between the two.

For modelling purposes, we have used a portfolio that uses the JP Morgan Emerging Market Bond Index (EMBI) as the reference portfolio, however with certain modifications. A portfolio-weight cap of 5% is applied and assets rated below B- are excluded. This portfolio has a weighted average rating of BB+ and a current yield of 290bps over the US Treasury benchmark.

Figure 8: Illustrative Investment Portfolio of TFIF (%)



The OECD is currently consulting the members of the DAC regarding the treatment of Blended Finance structures. An outcome is expected in March 2025, which will determine the ODA assessment methodology for sponsor investments into TFIF.

7.3. TFIF Resource Mobilization

To underpin a portfolio that can generate surplus returns sufficient to support meaningful incentives for TFCs, TFIF's weighted average cost of total capital must be at or below that of highly rated sovereign or supranational borrowers in the debt capital markets. To achieve this, the proposed TFIF capital structure assumes it can obtain AAA credit ratings for approximately 80% of the debt it issues, with the remainder sourced from TFIF Sponsors willing to make long-term loans, guarantees, and/or outright grants, on terms subordinate to those of the AAA debt investors. The maximum amount of Forest Payments to qualifying TFC participants would be limited to the annual and/or accumulated return on the TFIF portfolio after it has met its obligations to its senior and sponsor investors. In this respect, qualifying TFC participants would have the equivalent of a *de facto* equity interest in TFIF. Risk assessment modelling indicates that

the economic risk to the Sponsors' capital is between 0.24% and 1.14% depending upon the portfolio composition, due to the credit protection provided by the surplus of the investment income relative to the Forest Payments made to TFCs.

Given the global impact of maintaining tropical forest cover, the TFIF will seek to attract investment capital from the full spectrum of sponsor countries and market investors. This would include more traditional as well as non-traditional investors countries and philanthropies providing the catalytic sponsor capital, and institutional investors, including pension funds and insurance companies as well as Sovereign Wealth Funds, for the market borrowing tranches. As discussed above, attribution for the impact of mobilizing the market borrowing would be shared by the providers of the sponsor capital tranche.

The following describes these arrangements in more detail.

7.4. Market Borrowing Tranche

The Market Borrowing tranche will represent the bulk of the capital base of the TFIF (between 75-80%). This would comprise rated notes issued with a 10-30-year maturity, to match the long-duration of the TFIF's target asset portfolio. The TFIF is targeting a AAA rating for its market borrowing to minimize the funding cost of this tranche. Given the scale of the TFIF's anticipated borrowing (USD 100 billion) it would access a broad spectrum of the capital markets.

The target investors for the TFIF debt will be traditional institutional investors such as pension funds and insurance companies, fixed income asset managers and sovereign wealth funds. To the extent that the bonds match green investments, such as a portfolio of developing country climate linked assets that qualify under the NCQG's, TFIF will itself issue Green Bonds to its investor base.

Investors in TFIF bonds will not be able to count an investment as an offset for any carbon linked scheme, but the TFFF would report on its impact and as a participant in the TFIF capital stack, Market borrowing investors would be able to attribute the impact of their investments in terms of carbon captured or avoided production of CO₂ as well as biodiversity protected. It is anticipated that the climate impact of an investment into TFFF's bonds will be approximately 15 times that of a standard green bond linked to renewable energy production.¹⁴

7.5. Sovereign, Philanthropic and Other Sponsorship: Sponsor Capital

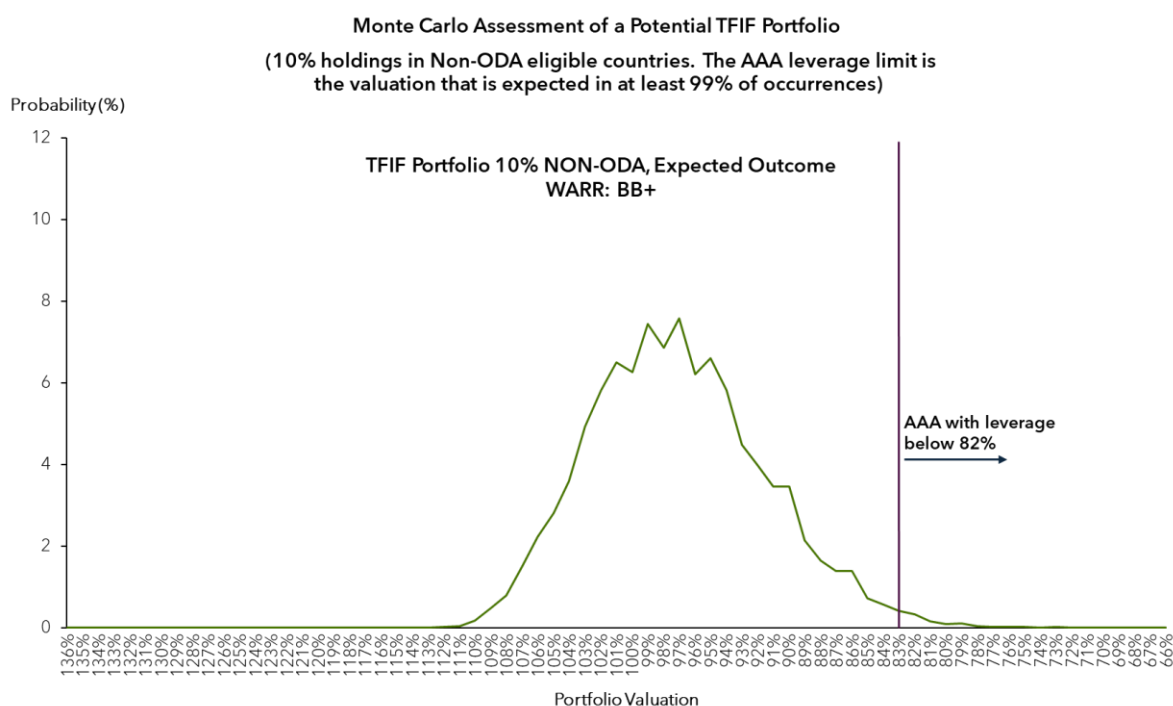
Preliminary risk modelling implies that to achieve the targeted AAA rating, the TFIF will require a sponsor capital tranche of no less than 20% of its capital base. This tranche stands junior to the senior debt in the capital structure, but senior to any retained earnings. For a USDeq 125 billion fund, this represents USDeq 25 billion (leverage of 1:4). The TFIF would retain the right to raise additional sponsor capital in the future to further build its capital base, if appropriate. As sponsors

¹⁴ At the scale of \$125bn linked to 1bn hectares of rainforest implies \$125 of capital investment per hectare. A \$1,000 investment therefore implies 8 hectares of rainforest linkage. If we assume that a hectare of rainforest absorbs 2 tonnes of CO₂ per annum, the implication is that a \$1,000 TFFF bond investment will support the absorption of 16 tonnes of CO₂ per annum. By comparison \$1,000 invested into a green bond linked to renewable energy would typically be linked to the mitigation of 1 tonne of CO₂ per annum. www.carbonyield.org

are part of the TFFF governance structure (see below), it is expected that they will retain their investment positions until maturity, although transfers between sponsors could be considered.

The amount of sponsor capital required relative to the senior tranche of debt is calculated using a Monte Carlo simulation. Theoretical investment portfolios are simulated and the probability of different outcomes assessed. The AAA attachment point is the leverage limit where 99% of outcomes will occur. See Fig. 9 below. In this case, using a 10% Non-ODA portfolio with junior capital of at least 18%, the remaining 82% of the capital structure would be rated AAA.

Figure 9: TFIF Portfolio Expected Outcome



The base assumption is that non-grant sovereign capital contributed to the sponsor capital tranche would be structured as a coupon paying investment. The coupon will be set to reflect the prevailing long-term ([20]-year) US Treasury bond yield or the equivalent in the currency of the specific block of capital that is contributed. The TFIF would reserve the right to skip a sponsor coupon payment if the fund breached a [95%] leverage limit. It is expected that the TFIF will run an investment surplus from the start, since TFCs forego a share of their revenues whilst net-deforestation and degradation are still occurring.

If TFIF has positive cashflow due to outperforming its investment objectives, this capital will be retained within the fund, allowing the fund to build its asset base. This is necessary to ensure that the fund can meet its target future payment obligations to TFCs adjusting upwards annually to consider inflation and to return the sponsor capital over a 30-year period starting in year 10.

The model assumes that all sponsor funds are received at the beginning of the life of the TFIF, although it may be that certain sponsors wish to make contributions over a few years. This would be acceptable if the commitment to fund were made via a legally binding pledge.

It would also be possible for a sponsor to support the TFFF via the provision of a guarantee. The guarantee would rank *pari-passu* with the paid-in sponsor capital but would require funding with additional market borrowing.

Recent examples relevant to TFIF include certain sovereigns' "loan contributions" to the Clean Technology Fund (CTF), comprised of long-dated term deposits at concessional interest rates and the hybrid capital investments by some sovereigns into the World Bank. In the U.S. context, participation by a tax-qualified philanthropy would be treated as a program-related investment given the below market interest rate of the sponsor tranche.

7.6. Costs

The operation and management of the TFFF will incur costs, including, but not limited to, costs associated with the efficient staffing, maintenance and work of the Secretariat, the operations of the Board of Directors of the Facility and the TFIF, and the securing of a range of services the TFFF will require from the Treasury Manager, asset managers engaged to manage the TFIF portfolio, the Trustee(s) and other service providers. These costs will be subject to an annual budget approved by the Facility and the TFIF and will be paid out of the income from the investment portfolio of the TFIF. Accordingly, such costs must be minimized.

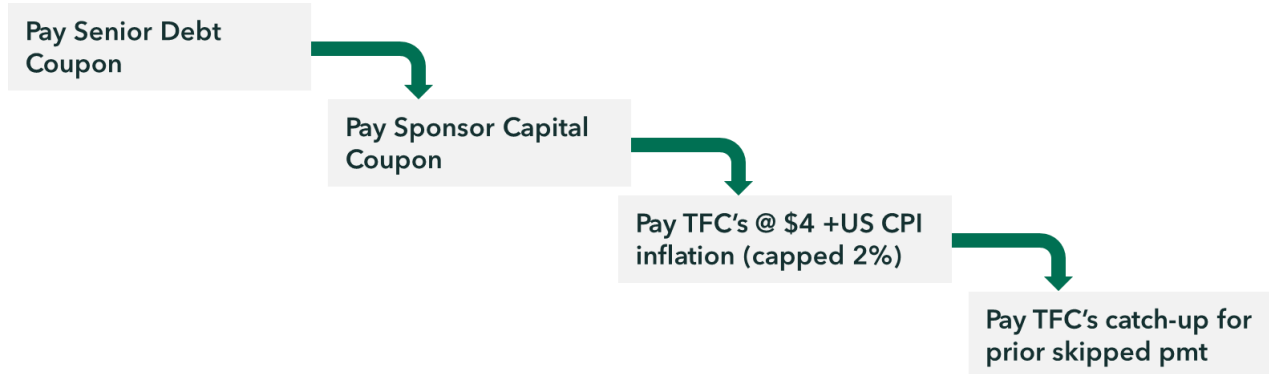
7.7. Payment to Tropical Forest Countries (Forest Payments)

Once the capital has been raised and invested, the positive yield of the TFIF can be determined. The TFIF will then set an initial payment per hectare rate, calculated to ensure that the fund is sustainable over the long term and, operating within its agreed stress limits, is able to maintain its objective of being a permanent capital vehicle for participating TFCs. Payments will automatically be adjusted upwards by the lower of US CPI inflation or 2%.

Forest Payments to qualifying TFCs would be made annually from surplus income after all debt service payments.

In the event of a permanent depletion in the asset value of the TFIF, TFFF would reduce current and future payments per hectare to restore the TFIF to financial sustainability. This could result in a period of lapsed payments to qualifying TFCs. If the senior debt of TFIF were no longer rated investment grade, TFIF could either: 1) operate at a reduced level without new bond issuance, as its retained earnings (equity) and grant capital should still produce income (that does not have a corresponding payment obligation to service); or 2) commence an orderly liquidation.

Figure 10: Payment Order

**Key Sponsor Capital Features**

- No coupon catch-up
- Agreed Repayment Dates

The Boards of the TFFF and TFIF will work together to ensure that the TFCs can be paid the annual results-based payment unless doing so would breach the financial integrity of the TFIF. In this circumstance a reduction in the payment amount is calculated using the steps outlined below:

Table 4: Sequence of Decision-Making

ANNUAL	
STEP 1	TFCs inform Secretariat regarding their eligible forest cover.
STEP 2	Secretariat informs the TFIF Board of the corresponding payment.
STEP 3	TFIF Board assesses the financial stability of the TFIF in light of the proposed payment, if it is deemed sustainable it will inform the Facility to proceed with allocations. If it would result in the TFIF breaching certain leverage limits, the TFIF Board will inform the Secretariat and Facility Board of the amount of financing that can be provided whilst maintaining the financial integrity of the TFIF.
STEP 4	The Secretariat allocates available amount amongst TFCs based on their reported eligible forest cover and the discount formula.
STEP 5	Secretariat informs Facility Board of allocations.
STEP 6	Facility Board approves allocations and asks Secretariat to communicate approval to TFIF Board .
STEP 7	TFIF Board instructs TFIF Trustee to transfer the necessary funds to the TFFF's Trustee to make Forest Payments approved by Facility Board to TFCs.

7.8. TFC Equity in TFIF

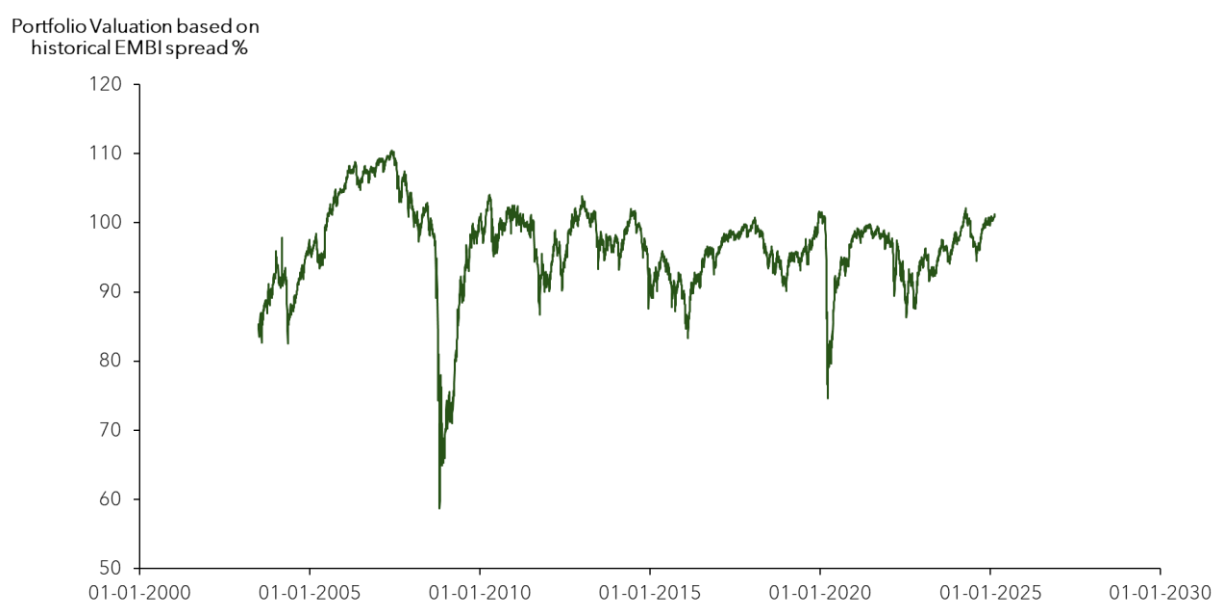
To the extent that the TFIF accrues more investment income than it requires to fulfil the results-based financing flow to the participating TFCs in a particular year, the excess is retained within the

TFIF and builds equity, which accrues in the name of the TFCs. In its simplest format, each participating TFC would have an ownership interest equivalent to its eligible forest as a percentage of the global eligible forest. In this regard, a country that deforests at a lower rate than its peers or indeed sees its forest cover increase, will see its share of periodic cashflow from TFIF increase as well as its stake upon dissolution of the TFIF portfolio. In the event that a TFC wished to leave the TFFF prior to the TFIF's dissolution, it would only be entitled to the annual payment in the year of departure and would forego its equity share.

8. TFIF Risk Analysis

The TFIF risk can be assessed both on a historical basis and on a forward-looking basis. To assess historic performance, we use the JP Morgan EMBI Global Spread as the benchmark and assess the value of the proposed investment portfolio discounted by the EMBI spread as it evolved over the past 20 years.

Figure 11: Historical Performance of Pro-forma portfolio



The EMBI has a track record for the past 20 years with approximately 5400 observations. During this time there have been 532 days when the portfolio value would have been below 90%, 216 days when the portfolio would have been below 85% and 100 days when it was below 75%.

The 100 days when it was below 75% all corresponded to the period from October 2008 to March 2009, during the global financial crisis. There were 44 days, from March to April 2020, when the portfolio value was below 85%, never falling below 79%, as a result of the COVID Pandemic.

Table 5: Historical Drawdown Episodes

Time	Duration below 90%, (days)	Avg Portfolio Value	Minimum Value
Jun-Nov '03	103	87.5%	82.7%

Apr-Aug '04	76	87.5%	82.6%
Oct 08-Mar '09	167	75.3%	58.6%
Aug '15	5	88.9%	87.8%
Dec '15-Mar '16	61	87.3%	83.3%
Feb '20-Jun '20	70	84.9%	74.6%
Jun-Jul '22	23	88.3%	86.3%
Sept-Nov '22	27	88.6%	87.6%
Time	Duration below 85%, (days)	Avg Portfolio Value	Minimum Value
Oct 08-Mar '09	143	75.3%	58.6%
Feb '20-Jun '20	44	84.9%	74.6%

This illustrates that, although there is a risk of a coupon skip, the short duration of all episodes when the portfolio value would have traded below 90% indicates that it is only during the Global Financial Crisis of 2008/9 that there would have been a TFIF Investor and Sponsor coupon disruption.

On a forward-looking basis we use a Monte-Carlo simulation to assess the risk to a TFC of a payment skip and the risk that a sponsor would see a reduction in their coupon or capital. We compared three theoretical investment portfolios for TFIF comprising investments in ODA eligible countries and a proportion invested in emerging economies that are not classified as ODA eligible by the DAC. Three portfolios were assessed with 0%, 10% and 25% Non-ODA eligible assets. As the table below illustrates, the weighted average credit of the portfolio improves as the weighting of Non-ODA assets increases from BB to BB+. We observe a reduction of the portfolio yield relative to US Treasuries as a result. The triple A leverage limits improve slightly for the same reason.

For the TFCs, we assess that there is approximately a 60% probability that during the life of the TFIF there is a need to reduce the Forest Payment, however any such reduction would be small with the expected payout at between 97.8% and 98.3% in each case.

The impact on the sponsor capital is slightly greater. For the 0% Non-ODA portfolio we have a 10.6% chance of a coupon skip and a 1.1% chance of a capital impairment. This risk declines with the 10% and 25% Non-ODA portfolios to a less than 1% risk of a capital loss.

Table 6: Investment Portfolio Comparison

Portfolio	0% Non-ODA	10% Non-ODA	25% Non-ODA
Weighted Avg Rating	12 (BB)	11.5 (BB+)	11 (BB+)
Spread	331 bps	311 bps	288 bps
AAA Leverage Limit	81%	82%	84%

Probability of a TFC Coupon Skip	60.22%	59.10%	59.8%
Expected Rtn	97.85%	98.15%	98.34%
Cash per ha (pre Infl)	\$3.91	\$3.92	\$3.93
Probability of a Sponsor Coupon Skip	10.58%	7.58%	4.48%
Probability of a Sponsor Capital Impairment	1.14%	0.68%	0.24%

9. Allocation of Forest Payments by TFCs

9.1. Application of Principles

To balance simplicity and accountability, Forest Payments allocation will be governed by the TFFF's core principles and other provisions of the TFIF and the Facility's Charters, and the terms and conditions of the agreements that Sponsors and TFCs will enter when formalizing their participation in the TFFF. The TFFF's core principles include sovereign decision-making, transparency, and revenue sharing with Indigenous People and Local Communities.

TFFF Forest Payments should be directed to national environmental programs that contribute directly or indirectly to forest conservation. In line with the principles of results-based finance, the TFFF will not track itemized expenditures funded through the Forest Payments at the national level. Individual TFCs will be able to mandate additional rules related to the use of the Forest Payments at the national level based on their internal considerations. Implementation and enforcement of such rules will be their responsibility. Forest Payments are expected to be additional and complementary to regular national budgets designated to forest conservation. A share of the Forest Payments allocated to qualifying TFCs is expected to flow to forest stewards, i.e. to those actors on the ground who contribute directly to conserving and restoring forests, including local communities, indigenous people, farmers, managers of privately protected areas, among others.

9.2. Use of National Systems to Receive Funding

Forest Payments to qualifying TFCs will be disbursed to their respective national treasuries, either directly to the treasury or to designated funds. Ex-ante assessment of TFCs' public financial management systems based on a pre-agreed methodology set out in the eligibility criteria will be required to ensure the presence of transparent and inclusive mechanisms to receive and allocate resources to those who effectively conserve forests (IP&LCs). If a TFC's public financial management system cannot meet these requirements, technical assistance could be provided by qualified technical partners (qualified being determined by the Secretariat).

9.3. Forest Payments Sharing with Indigenous People and Local Communities

Indigenous Peoples and Local Communities (IP&LCs) are critical partners to achieve global climate and conservation goals necessary for a livable planet. A recent study published by Landmark found that Indigenous Peoples and Local Communities (IP&LCs) hold or manage 54% of the world's remaining intact forests.¹⁵ At the same time, the capacity of IP&LCs to continue to provide these global ecosystem services is at risk. This is due to the lack of national recognition of their identities as distinct social cultural groups, their rights to lands and natural resources, and lack of recognition of their traditional knowledge and cultural systems which are fundamental to sustain this role.

There is a growing global consensus on the need to recognize the role of IP&LCs in nature and climate finance.¹⁶ Despite their significant contributions to climate change mitigation and the disproportionate impacts they have faced from a changing climate, a 2021 report revealed that over the past decade, IP&LCs have received less than one percent of ODA for climate mitigation and adaptation, or USD 270 million on average per year, of which they are directly managing only USD 46.3 million.¹⁷ At COP26, the UK, Norway, Germany, USA, and the Netherlands, in partnership with 17 funders, pledged to provide USD 1.7 billion from 2021 to 2025 for Indigenous Peoples.¹⁸ In 2022, the Biological Diversity COP15 adopted commitments within the Kunming-Montreal Global Biodiversity Framework that recognize the role of IP&LCs in eight of the twenty-three targets set in the Framework.

Aligned with this growing global recognition, the TFFF recognizes the fundamental role of IP&LCs and seeks to recognize and support their roles as partners in this effort by establishing requirements for participating TFCs to allocate a specified proportion of funds [minimum of 20%] in support of programs directly benefiting IP&LCs.

The exact modality for allocation of a portion of Forest Payments to IP&LCs via direct financing mechanisms, or otherwise, will be co-designed in dialogue with IP&LCs representatives.

¹⁵ Reyta, K., Veit, P., & von Braun, J. (2024, October 17). *Protecting biodiversity hinges on securing Indigenous and community land rights*. World Resources Institute. <https://www.wri.org/insights/indigenous-and-local-community-land-rights-protect-biodiversity>

¹⁶ These commitments build on global recognition of Indigenous Peoples' critical role in nature conservation as emphasized in the UNGA Resolution on IPs rights (2007) and the DESA UN 'State of the World's Indigenous Peoples' Report (2021). These documents highlighted that protecting IPs' rights and strengthening their spiritual relationship with their lands and resources are effective means to safeguard critical ecosystems, waterways, and biological diversity.

¹⁷ Indufor and Rainforest Foundation Norway, 2021. "Donor Climate Funding and Indigenous Peoples and Local Communities' Rights". <https://induforgroup.com/donor-climate-funding-and-indigenous-peoples-and-local-communities-rights/>.

¹⁸ <https://www.fordfoundation.org/news-and-stories/news-and-press/news/governments-and-private-funders-announce-historic-us1-7-billion-pledge-at-cop26-in-support-of-indigenous-peoples-and-local-communities/#:~:text=GLASGOW%20%E2%80%93%20The%20UK%2C%20Norway%2C,biodiversity%20loss%2C%20and%20pandemic%20risk%2C>

10. TFFF Governance

10.1. The Facility and the Investment Fund

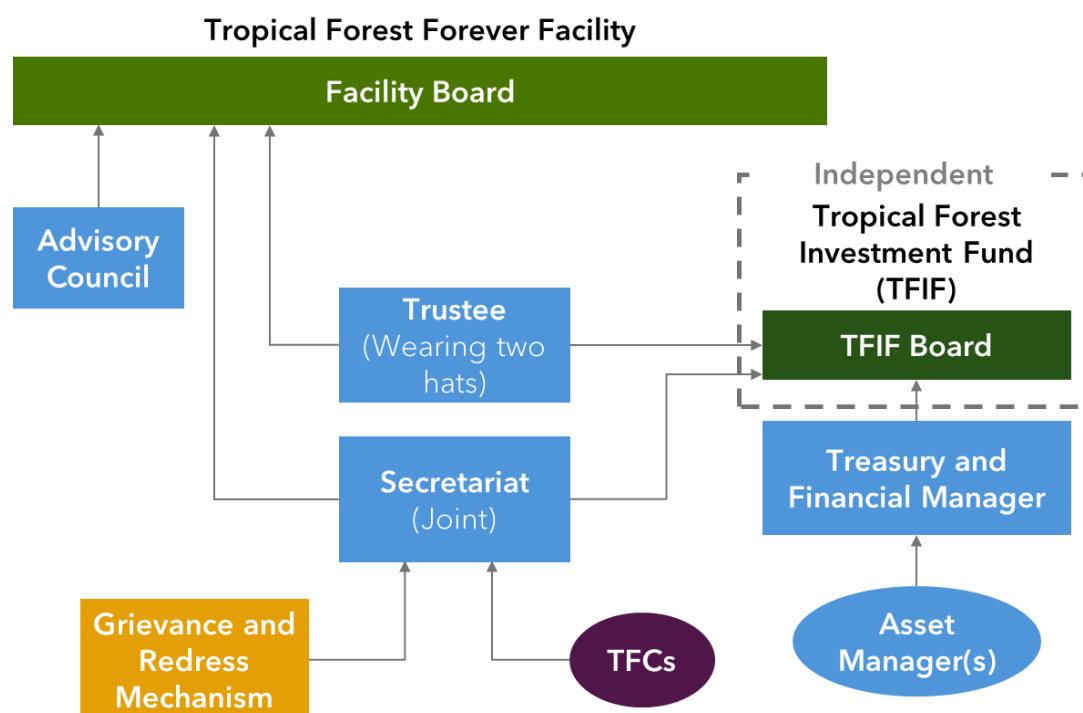
The two distinct arms of the TFFF, the Tropical Forest Forever Facility (the “Facility”) and the Tropical Forest Investment Fund (TFIF) have the same objective – incentivizing the conservation and increase of tropical forests, but they each have different purposes and conduct distinct functions in pursuit of their common objective.

To that end, the Facility and the TFIF will have their own governance structures, set out in their own separate charters, which will refer to and be consistent with each other. The Facility and the TFIF will have separate boards (the Facility Board and the TFIF Board). They will share a joint secretariat (Secretariat) for ease of administration and to help coherence. But, to ensure the financial independence of the TFIF, the Secretariat will have different reporting lines within it. A dedicated Senior Finance Officer, selected by the TFIF Board, will oversee the secretariat functions that are exclusively related to the TFIF and will report directly to the TFIF Board. A CEO selected by the Facility Board will manage all secretariat functions related to the Facility and general secretariat functions related to the overall TFFF initiative and will report directly to the Facility Board.

The TFIF and the Facility will each have a financial administrator (Trustee) to provide financial administrative services, such as receipt, custody and disbursement of funds. The same institution may serve as Trustee for both the Facility and TFIF but, would maintain separate, distinct trust accounts for both arms. It is proposed that an MDB serve as Trustee and that the same institution performs this role for both the TFFF and the TFIF, providing customized services to each, according to their differentiated needs. The TFIF will engage a Treasury and Financial Manager to manage the TFIF’s bond issuance program and to oversee the engagement of asset managers to manage TFIF’s investment portfolio.

The elements of the Facility and the TFIF’s respective governance structures are illustrated in Figure 12.

Figure 12: Governance components of the Facility and the TFIF



The roles and responsibilities of the different parts of the TFFF governance structure are set out below.

10.2. Tropical Forest Forever Facility (The Facility) Governance Structure

The governance structure of the Facility will include:

- A Board of Directors
- An Advisory Council
- A Secretariat
- A Trustee

10.2.1. Facility Board of Directors

10.2.1.1. Membership

The Board will have eighteen member countries, among which nine members will be from countries providing financial support to the TFFF (hereinafter “Sponsor Countries”) and nine members shall be from non-sponsor TFCs who meet the criteria laid down in the Facility Charter for participation in the TFFF (hereinafter “Eligible TFCs”).

10.2.1.2. Selection of Members

Representatives of TFCs will be selected by the Eligible TFCs. Regional representation, which will be provided for in the Facility Charter, is proposed as follows:

- Each region—Africa, the Americas, and Asia—will have three Eligible TFC representatives: one representing the country with the largest tropical forest area in the region, one representing the country with the lowest deforestation rate in the region, and one serving as a rotating representative. Every three years, tropical forest area and deforestation rates will be recalculated to adjust the allocation of seats accordingly.
- All Sponsors Countries contributing at least [USD 1 billion] to the TFFF will have a seat on the Board until the total number exceeds nine. Once that number is met, representation will be determined as follows, which will be reflected in the Facility's Charter:
- Sponsor Countries contributing more than 11% of the total sponsor tranche¹⁹ will be entitled to one designated seat board on the Facility Board.²⁰ Countries contributing less than this threshold can form constituencies to ensure collective representation. Sponsor capital refers to the proportion of a sponsor's contributions through loans, guarantees, or grants within the sponsor capital tranche, excluding any contributions made via senior notes. Every [three] years, the percentage of a Sponsor Countries' contributions relative to the overall sponsor capital will be recalculated, and board seat allocations adjusted as necessary.

The 11% Sponsor Country tranche of capital threshold ensures proportionality, giving greater representation to countries with larger financial commitments. This is critical for maintaining fairness and ensuring that those with more substantial investments have a voice in shaping the Facility's operations. Given the allocation of nine sponsor seats, this threshold is both practical and equitable, aligning representation with the scale of contributions.

10.2.1.3. Board Membership and Sponsor Country Capital Repayment

The TFIF arm of the TFFF will begin repaying sponsor countries' capital in the [10th] year of operations, gradually altering the share of sponsor capital in the TFIF. After forty years, by which time all Sponsor Country capital is expected to have been repaid by the TFIF, the Facility will undertake a comprehensive review of Sponsor Country participation and voting rights on the Facility Board.

10.2.1.4. Term

Board members will serve for a three-year term and be eligible for renomination.

10.2.1.5. Role of the Board of Directors

The Board of Directors will be responsible for (examples):

- Maintaining strategic oversight of the Facility to ensure the effective achievement of the Facility's goals and objectives, as set out in the Facility's Charter.
- Ensuring that the Facility's Eligibility Criteria, policies and operational strategies, as set out in the Facility's Charter, are monitored and evaluated on a regular basis.
- Approving any amendments to the provisions of the Facility's Charter.

¹⁹ It is important to highlight that the 11% considers both guarantees and loans in equal proportions.

²⁰ Sponsor Countries' contributions would be junior to the interest of bondholders investing in any bonds issued by the TFIF (meaning, generally, that if the TFIF had insufficient resources to pay the interest due to bondholders and Sponsor Countries, it would pay bondholders first).

- Overseeing revisions and enhancement of the Facility's satellite-based methodology for verifying TFCs' forest performance measurement systems, as science and technology advances, in accordance with the parameters set out in the Facility's Charter.
- Appointing the CEO of the Secretariat, overseeing the Secretariat's work, and assigning specific tasks and responsibilities to the Secretariat, consistent with the role of the Secretariat, as set out in the Facility's Charter.
- Approving the release of annual reports on, *inter alia*: (i) Eligible TFCs' forest cover, (ii) the resources allocated to each Eligible TFC by the Facility, and (iii) the programs that each Eligible TFC intends to fund with those resources, as prepared by the Secretariat.
- Approving the Secretariat's calculations of Forest Payment allocations due to Eligible TFCs, following the TFIF's communication to the Board and the Secretariat of the amount of TFIF resources available to make Forest Payments, on an annual basis, and upon the termination of the TFFF. The Secretariat's calculations will be made in accordance with a process to be set out in the Facility's Charter²¹. Once approved, the amounts will be relayed to the TFIF Board, which will instruct the Trustee of TFIF to transfer the necessary funds to the Facility's Trustee's (to disburse the Forest Payments to Eligible TFCs).
- Appointing an independent auditor to perform an annual audit of the Facility's operations and reviewing and approving that audit.²²
- Reviewing and approving the Secretariat's annual budget.
- Approving the members of the Advisory Council.
- Approving the Facility's communication strategy and branding, and annual report.
- Defining and approving professional and ethical standards for the Facility.

10.2.1.6. Board Committees

The Board may appoint one or more standing committees and/or ad hoc committees to assist it with the discharge of its responsibilities including, but not limited to, an Environment Committee and an Audit Committee, each comprised of Board members with such specific skills and expertise as the Board deems necessary to fulfil the responsibilities of a particular committee.

²¹ As discussed in the Finance chapter, it is proposed that, if, in a given year there are insufficient funds to be distributed to the Eligible TFCs at the agreed rate per hectare, the available funds will be divided by the total eligible hectares of standing forests of that year, less penalties, with each TFC receiving an equal rate per hectare (albeit less than the originally agreed amount). It is further proposed that, in subsequent years, after fulfilling the payment obligations to investors and sponsors, and covering the administrative costs of the Facility and TFIF, any additional available funds (provided they do not jeopardize the financial stability of the TFFF) will be used to compensate TFCs for the shortfall in previous years. If, there are surplus funds generated (e.g., the payment for the total number of eligible hectares, less penalties, is lower than the income generated), with no outstanding obligations from previous years to fulfil, the full eligible payment will be made to the TFFF for distribution to the TFCs. The remaining surplus funds will not be disbursed but will instead contribute to building a capital buffer in the fund.

²² The Facility should be audited by an independent auditor. When a fund's secretariat is housed in an MDB, the MDB's audit of its own affairs does not include an audit of the extent to which the secretariat is being conducted, in accordance with the fund's charter. Some funds provide for periodic independent evaluations, rather than annual audits of their operations. The audits referred to in this section should be distinguished from the financial audit that is done of the trust fund account. The Trustee makes the arrangements for an independent audit of the trust fund accounts.

10.2.2. Co-Chairs

10.2.2.1. Appointment

The Board will appoint two Co-Chairs, one from a Sponsor Country and one from an Eligible TFC, each of whom shall serve for a three-year term.

10.2.2.2. Role and Responsibilities of the Co-Chair

- Chairing meetings of the Board and facilitating Board decision-making.
- Providing leadership to the Board.
- Managing the business of the Board, in collaboration with the Facility Secretariat, through setting the agenda for meetings of the Board, and taking full account of the issues to be discussed.
- Representing the collective interests of the Facility in external settings or with third parties within the governance structure.

10.2.2.3. Voting

Each member of the Board will be entitled to cast one vote. A majority of the members of the Board from Sponsor Countries and a majority of the members of the Board from Eligible TFCs shall constitute a quorum for the meetings of the Board. The following rules will apply:

Decisions on Administrative Matters will be made by a *simple majority*.

- Decisions on Operational Matters will require a *two-thirds majority of members present and voting*.
- Decisions on Extraordinary Matters will require a two-thirds majority of both Sponsor Country members and Eligible TFC members.
- Decisions on amendments to the Facility's Core Principles will require *consensus of all members of the Board*.

For these purposes, Administrative Matters will include:

- Decisions on the date, timing and format of meetings.

Operational Matters will include:

- Decisions made in connection with the Board's discharge of its responsibilities listed above (including decisions to amend any Annex to the Facility Charter unless the Annex specifically states otherwise) except for Administrative Matters and Extraordinary Matters.

Extraordinary Matters will include:

- Decisions made to amend the Facility Charter.
- Decisions to terminate the Facility, *provided however*, that a decision to terminate the TFFF will require a decision by the Facility Board as an Extraordinary Matter and a decision by the TFIF Board as an Extraordinary Matter.

10.2.3. Advisory Council

10.2.3.1. Membership

The non-decisional Advisory Council will consist of a total of ten persons who will be representatives from academia and civil society, technical experts, IP&LCs' leaders, and others with recognized expertise in the fields of forestry and the environment and local community concerns.

Council membership, which will be uncompensated, will be approved by the Board. Sponsors and Eligible TFCs and civil society may suggest to the Secretariat names of potential members of the Advisory Council. The Secretariat will compile and submit nominations for approval by the Board, following a pre-agreed procedure.

10.2.3.2. Term

Council members shall serve for a three-year term and are eligible for renomination.

10.2.3.3. Role of the Advisory Council

Members of the Advisory Council will advise the Board on matters arising for Board decision within the expertise of Council members. The main objectives of the Advisory Council are to promote transparency on TFFF operations to a broad set of stakeholders incorporating diverse perspectives and strengthening TFFF engagement with civil society. Therefore, the Council will act as a knowledge-sharing forum and sounding Board, enhancing transparency and technical integrity and dialogue with civil society and providing advice on strategic goals and how to achieve them.

10.2.4. Secretariat

10.2.4.1. Role of the Secretariat

The Secretariat will be accountable to the Board and will be responsible for the day-to-day management of the Facility, including:

- Servicing and preparing proposals for the Board and its committees and setting up the agenda and meetings of the Board and its committees.
- Undertaking all responsibilities assigned to the Secretariat under the Facility Charter in connection with assessing TFCs' initial eligibility to participate in the Facility, and ongoing compliance with the eligibility criteria set in the Facility Charter.
- Maintaining the Facility's methodology for verifying TFCs' forest cover performance measurement under continual review and monitoring to ensure it incorporates the latest scientific advancements and technological methods, keeping the Board informed of the findings of such review and proposing changes in approved methodologies for Board approval.
- Ensuring that the measurement methodologies of the Eligible TFCs comply with the methodologies approved as part of the Eligibility Criteria set out in an Annex to the Facility's Charter.

- Calculating annual Forest Payment allocations to Eligible TFCs based on (i) the amount of resources available each year as determined and communicated by the TFIF Board and (ii) the information provided to the Secretariat by the Eligible TFCs regarding their forest cover (as verified in accordance with the procedures and processes in the eligibility criteria set out in the Facility Charter and its annexes), and (iii) the per hectare value of forest cover. Submitting the proposed allocations of resources for the Facility Board approval, and, following such approval, submitting them to the TFIF Board for review and final approval of the disbursements.
- Coordinating the engagement of Sponsor Countries, Eligible TFCs, and other stakeholders of the TFFF.
- Managing the recruitment, onboarding and rotation process of Advisory Council members and the logistics of the Advisory Council's role.
- Coordinating and sharing information with the Trustee, as needed to facilitate the Trustee and the Secretariat's discharge of their respective responsibilities under the Facility's CEO of the Secretariat.
- Collecting, compiling and preparing annual reports on such matters as conserved forest area, deforestation rates, the amount of funding distributed to Eligible TFCs, and the specific programs each Eligible TFC plans to support using the funds received from the Facility.
- Securing an annual audit of the Facility's operations.
- Preparing for Board approval of an annual budget for the Secretariat's operations and reporting to the Board on Secretariat spending.
- Monitoring and reporting to the Board on the Secretariat's operations and keeping the Board informed of changes and developments.
- Managing the TFFF's communications, outreach and branding strategy.
- Sharing knowledge and information, including through the preparation and publication of an annual report.
- Participating in international meetings, such as Multilateral Environments Agreements (MEA) conferences, and United Nations Climate Change Conferences (COPs).
- Facilitating the functioning of the TFFF Grievance and Redress Mechanism.

The Secretariat will be headed by a CEO, selected by the Board (in consultation with the host institution and Trustee), further to an open and competitive recruitment process. The CEO will serve a four-year term (renewable once) and will be accountable to the Facility Board for the Secretariat's performance. The CEO will select and supervise the staff of the Secretariat and will coordinate and communicate regularly with the Senior Finance Officer, selected, appointed and directly responsible to the TFIF Board.

10.2.5. Trustee (Expected to be an Existing MDB)

10.2.5.1. Role of the Trustee

The Trustee will have the following powers and duties:

- Holding the Facility's financial resources in trust separate and apart from its own (the Trustee's) assets and managing and using such resources in accordance with the purposes of the Facility Charter and as directed by the Facility Board and/or Secretariat in accordance with the terms of the Facility Charter.
- Entering into Participation Agreements with Eligible TFCs upon the instruction of the Facility Board, in form and substance satisfactory to the Board.²³
- Disbursing Forest Payments to Eligible TFCs upon instruction from the Facility Board.
- Entering into legal agreements with providers of services to the Facility, on behalf of the Facility, and representing the Facility in all legal proceedings brought by or against the Facility.
- From time to time appointing or otherwise engaging one or more banks or trust companies or other financial institutions to serve as escrow agent(s) on behalf of the Facility in respect of Facility resources that may be deposited into an escrow account pending disbursement.
- Incurring and paying any reasonable costs or expenses which in its opinion are necessary or desirable to carry out any of the purposes of the Facility, and to make payments from Facility resources to itself as Trustee to the extent provided in the Facility Charter, in accordance with the budget approved by the Facility Board.
- Providing the Facility Board with an annual audited Trustee's financial report of the Facility's financial resources.

10.2.6. Grievance and Redress Mechanism

The Facility Charter will include a Grievance Redress Mechanism (GRM), which will act as a recourse for situations in which, despite proactive stakeholder engagement, certain stakeholders develop concerns about actual, potential or perceived impacts of the Facility's operations arising from the TFFF's provision of support to participating TFCs and/or participating TFCs' related policies and programs to promote Eligible Forest. The GRM will help to identify systemic issues, improve environmental and social integrity outcomes and promote accountability among TFCs participating in the TFFF.

The GRM will have a two-tiered structure. Global and regional issues will be addressed at the Secretariat level. Local (in-country) issues will be addressed at the local level. The GRM will operate alongside, and complement, participating TFCs' existing grievance and redress mechanisms, local Ombudsmen, and other complaint resolution and legal processes. Reflecting global best practices for GRM design, it will be accessible, predictable, equitable, non-retaliatory and consultative. Immediate next steps in its design include:

- Consultations with CSOs and IP&LCs so that the GRM can be shaped with their questions and concerns in mind.
- Country-level analysis of the national GRM systems of TFCs interested in participating in the TFFF so that the TFFF GRM can build upon those systems.

²³ The Participation Agreements will be entered into between Eligible TFCs and the Trustee of the Facility because an MDB trust fund (whether it is a traditional MDB trust fund or a financial intermediary fund) does not have legal capacity to enter into legal agreements or arrangements. However, the Secretariat of the Facility, under the oversight of the Facility Board, not the Trustee, would be responsible for monitoring Eligible TFCs' compliance with the Participation Agreements.

- Assessment of national forestry GRM systems to understand the kinds of issues they address and to learn from their experience.
- Design of the TFFF GRM.

10.3. The TFIF Governance Structure

As the central financing mechanism of the TFFF, the essence of the TFIF governance structure is its independence from the Facility. While the integrity and workability of the Facility will be essential to TFIF's ability to attract sponsors and investors, the financial viability of the TFIF depends on its freedom to make market-driven decisions. For this reason, there needs to be a clear, bright-line distinction between TFIF and the Facility, especially given that the TFIF relies on public bond-market borrowing. Independence of the TFIF is essential to ensure that decisions regarding the TFIF's financial policy – including, but not limited to, capital market access strategy, investment policy, asset allocation, asset selection, and the engagement of third-party service providers (such as asset managers/investment banks, custodians, and paying agents)–will be made exclusively with the aim of optimizing risk-adjusted returns and maintaining a strong financial profile for the TFIF.

The TFIF can function with a small expert Board to oversee the engagement of a Treasury and Financial Manager, and a financial administrator (Trustee), and to monitor their performance. Sponsor and investor confidence will be affected by the quality and expertise of the TFIF's Board and service providers (Treasury and Financial Manager, Asset Managers, and Trustee).

The TFIF will need a Secretariat to play a managing and coordinating role, but it will be a much smaller role than that required of the Facility Secretariat. For that reason, the TFIF Secretariat role can be assumed by a small, dedicated unit within the Facility Secretariat, headed by a Finance Officer reporting directly to the TFIF Board. Additional safeguards may be built into the role of the Senior Finance Officer and the Secretariat, as needed, to ensure the operational independence and separation of the TFIF unit of the Secretariat from the Facility unit of the Secretariat.

The TFIF governance structure will include:

- A Board of Directors
- A Treasury and Financial Manager
- A Secretariat
- A Trustee²⁴

²⁴ Note, this role could be assumed by the same institution that is serving as Treasury and Financial Manager. In two outstanding precedents, the International Financing Facility for Immunization (IFFIm) and the Clean Technology Fund (CTF), the World Bank plays the role of Treasury Manager and Trustee. In IFFIm's case the role is merged with the services provided under the Treasury Management Agreement. In the case of the CTF, the structure refers to both roles separately.

10.3.1. TFIF Board of Directors

10.3.1.1. Membership

The Board will consist of seven professionals with expertise, training and experience in the management and investment of financial assets and in the mobilization of capital on global capital markets. Board membership will not be a full-time position, but Board members will be compensated for their role.²⁵

It is proposed that Sponsor Countries establish a set of qualifications (Terms of Reference, "ToR") for Board members and appoint an independent selection committee to identify candidates who meet these qualifications. Sovereign Sponsors would nominate and appoint the Board, selecting from the independent committee's recommendations.²⁶

10.3.1.2. Term

Board members shall serve for a three-year term and be eligible for re-nomination once.

10.3.1.3. Role of the Board of Directors

The Board of Directors will be responsible for (examples):

- Maintaining strategic oversight of the TFIF.
- Approving and keeping under review the TFIF's financial policies and strategies, including but not limited to its funding strategy, risk management policy, investment management strategy and policy and liquidity policy, all which will be proposed by the Treasury and Financial Manager, and any amendments proposed to such strategies and policies, and the standards and procedures of the TFIF.
- Approving the engagement of the Treasury and Financial Manager, overseeing the activities of the Treasury and Financial Manager, and approving any material amendments to the Treasury and Financial Management Agreement pursuant to which the Treasury and Financial Manager will be engaged.
- Overseeing the Treasury and Financial Manager's selection and appointment of asset managers, who will keep the Board apprised of such selections and appointments, including with respect to the terms and conditions of asset managers' engagement and any subsequent terminations. Such terms and conditions will establish clear performance criteria to guide the asset managers, whose performance will be closely monitored and evaluated by the Treasury and Financial Manager.
- Selecting, appointing and overseeing the work of a Senior Finance Officer who will serve in the Secretariat and assist the Board in fulfilling its functions and responsibilities, as set out in the TFIF's Charter, and be directly accountable to the Board.²⁷

²⁵ Sponsor Countries will set the compensation amount and determine the overall annual budget for this structure.

²⁶ It is proposed to follow the same process for initial Board nominations and subsequent Board nominations. This departs from the IFFim precedent, which has a more informal process for Board renewal.

²⁷ The Senior Finance Officer will be a vital role for the smooth functioning of the TFIF. The Treasury and Financial Manager and the asset manager(s) engaged to invest the TFIF's assets will undertake the core TFIF's financial functions, and the Trustee will provide necessary financial administrative services. But each of them (the Financial Manager, the asset manager(s) and the Trustee) will be service providers to the TFIF, providing services to the TFIF amongst many other entities. The Senior Finance Officer, therefore, will

- Overseeing the work of the Secretariat undertaken on the TFIF's behalf and assigning specific tasks and responsibilities to the Secretariat, consistent with the role of the Secretariat, as set out in the TFIF's Charter.
- Instructing the Trustee to disburse payments due from the TFIF to third parties. Such payments include, but are not limited to, principal and interest payments to TFIF bondholders and Sponsor Countries, compensation for the Treasury and Financial Manager and other service providers to the TFIF, as well as payments due to the Secretariat to cover its administrative costs.
- Instructing the Trustee to transfer funds to the Trustee of the Facility for payment of annual Forest Payments approved by the Facility Board.
- Appointing an auditor to perform an annual audit of the TFIF and reviewing and approving such audit.
- Reviewing and approving the TFIF's annual report and the Trustee's annual report and financial statements.
- Reviewing and approving the Secretariat's annual budget in coordination with the Facility Board.
- Approving the TFIF's communication strategy and branding, and annual report.
- Reviewing an annual statement of investment performance expectations and an annual assessment of actual performance to be prepared by the Treasury and Financial Manager.
- Defining and approving professional and ethical standards for the TFIF.
- Approving any amendments to the TFIF Charter and communicating any relevant amendments or other developments to the Board of the Facility, as appropriate.

10.3.1.4. Board Committees

The Board may appoint one or more standing committees and/or ad hoc committees to assist it with the discharge of its responsibilities. These may include, but are not limited to, an audit committee, comprised of Board members with such specific skills and expertise as the Board deems necessary to fulfil the responsibilities of a particular committee, taking into consideration the total annual budget allocated for the Board.

10.3.1.5. Chair

The Board will appoint a Chair who shall serve for a three-year term, renewable once.

10.3.1.6. Voting

Each member of the Board will be entitled to cast one vote. A majority of the members of the Board will constitute a quorum for the meetings of the Board.

be the full-time "eyes and ears" of the TFIF. It is proposed that the Senior Finance Officer be selected and appointed by the TFIF Board. Candidates for the position may be identified in several ways, including through recommendations from Sponsor Countries, Eligible TFCs and the Secretariat. Selection should be done by a panel that includes representatives of the TFIF Board.

Decisions will be taken by four out of seven votes, except for Extraordinary Matters, which will require the approval of at least six out of seven votes.

Extraordinary matters shall include:

- A decision to amend any provision of the TFIF's Charter.
- A decision to terminate the TFIF, *provided, however*, that a decision to terminate the TFFF will also require a decision as an Extraordinary Matter by the Facility Board.

10.3.2. Treasury and Financial Manager

10.3.2.1. Appointment

The Treasury and Financial Manager will be appointed by the Board and will serve under a Treasury and Financial Management Agreement approved by the Board.

10.3.2.2. Roles and Responsibilities of the Treasury and Financial Manager

The roles and responsibilities of the Treasury and Financial Manager will include:

- Preparing funding, risk management, investment management, and liquidity policies for approval by the TFIF Board and subsequently administering these policies. This includes, but is not limited to, managing asset allocation (such as cash reserve requirements), mitigating currency risks, ensuring sustainable withdrawal levels for forest payments to Eligible TFCs, and advising the Board annually on the available funds for Forest Payments (consistent with the application of the TFIF's risk management and liquidity policies and related reserve requirements).
- Managing all aspects of the TFIF bond issuing program, including, but not limited to, negotiating all necessary agreements, coordinating with the arrangers of such issues, and securing all regulatory approvals required.
- Establishing engagements with one or more asset managers for the investment portfolio and overseeing the performance of such asset managers.
- Taking appropriate action if asset managers fail to meet performance expectations or criteria to be outlined in the terms and conditions of the investment management agreements to be entered into between the TFIF and the asset managers. Such actions may include recommending to the TFIF Board that the services of an asset manager are discontinued, if in the opinion of the Treasury and Financial Manager, discontinuation is indicated.
- Ensuring regular communication with sponsor countries and investors in TFIF bonds and managing investor outreach and the marketing of TFIF bonds.
- Preparing an annual statement of investment performance expectations for the investment portfolio and an annual assessment of actual performance to the Board and communicating to the Senior Finance Officer and the Board relevant changes and developments in a timely manner, as appropriate.

10.3.3. Secretariat

10.3.3.1. Appointment

The Board will appoint a dedicated Senior Finance Officer, who shall be a senior finance professional with skills and experiences in investment management, capital markets and project finance, as detailed in terms of reference to be approved by the Board, to serve as a member of the Secretariat and report directly to the Board. The Senior Finance Officer will not serve as, or duplicate any of the responsibilities of, the Treasury Manager or asset managers.

10.3.3.2. Role of the Secretariat

The Secretariat, led with respect to matters of the TFIF, by the Senior Finance Officer, will be accountable to the Board and will perform the following functions:

- Preparing proposals for the TFIF Board and its committees and setting up their agenda and meetings.
- Coordinating the engagement of Sponsor Countries and other stakeholders of the TFIF, including potential additional sponsors.
- Coordinating and sharing information with the Treasury and Financial Manager and Trustee, as needed, to facilitate the Treasury and Financial Manager, the Trustee and the Secretariats' discharge of their respective responsibilities under the TFIF's Charter.
- Securing annual accounting and auditing services, in consultation with the Trustee and the Treasury and Financial Manager, to conduct an annual audit of the TFIF.
- Preparing the TFIF's annual report.
- Managing the TFIF's general communications, outreach and branding strategy.

10.3.4. Trustee (Existing MDB)

10.3.4.1. Roles of the Trustee

The Trustee shall have the following powers and duties:

- To receive and hold the financial resources of the TFIF in trust separate and apart from the assets of the Trustee, and to manage and use such resources for the purposes of, and in accordance with the TFIF Charter.
- To ensure timely receipt of funds from Sponsor Countries in accordance with the terms of the Investment Agreements and to disburse the funds of the TFIF in accordance with the instructions of the TFIF Board and/or the Treasury and Financial Manager and the Senior Finance Officer of the Secretariat, consistent with the roles and responsibilities of the TFIF Board, Treasury and Financial Manager and Secretariat, as set out in the TFIF's Charter, the Investment Agreements and the Treasury and Financial Manager Agreement.
- To disburse capital subscriptions repayments to Sponsor Countries, in accordance with the instructions of the TFIF Board and/or the Treasury and Financial Manager and the Senior Finance Officer of the Secretariat, consistent with the roles and responsibilities of the TFIF

Board, Treasury and Financial Manager and Secretariat, as set out in the TFIF's Charter, the Investment Agreements and the Treasury and Financial Manager Agreement.

- From time to time appoint or otherwise engage one or more banks or trust companies or other financial institutions to serve as escrow agent(s) on behalf of the TFIF in respect of TFIF resources that may be deposited into an escrow account pending disbursement.
- To invest TFIF resources pending disbursement in such manner as it may decide. All the income from such investments shall be credited to, and used exclusively for the purposes of, the TFIF. Any investment loss shall be debited to the TFIF. Without limiting the foregoing, the Trustee shall have the power to invest TFIF resources in such securities, instruments and other obligations as authorized investments for other trust fund assets maintained by the Trustee or to retain the TFIF's assets in cash.
- To incur and pay any reasonable costs or expenses which in its opinion are necessary or desirable to carry out any of the purposes of the TFIF, and to make payments from TFIF resources to itself as Trustee to the extent provided in the TFIF's Charter.
- To provide the TFIF Board with an annual audited financial report of the TFIF's financial resources, which report shall be prepared in collaboration with the Treasury and Financial Manager.

11. Theory of Change: How will TFFF Drive Tropical Forest Conservation?

11.1. Create a Sufficient Incentive to Shift Political Economy Towards Forests

The TFFF's direct objective is to provide a clear and transparent results-based payment structure that rewards countries for successful conservation of natural forests within their jurisdictions.

TFCs face trade-offs when protecting and restoring their forests because cleared forest land can be "repurposed" for agriculture, mining or other uses that produce an income at market value.²⁸ Much of the over-exploitation of forests is either illegal or driven by perverse incentives, such as fiscal incentives, subsidies and other policies that fail to account for the full natural wealth of forests and the benefits of their ecosystem services. These services, such as climate stability, water regulation, CO₂ sequestration and biodiversity support - benefit not just local populations but also extend globally, making them vital global public goods.

Experience shows that economic incentives for forest conservation and forest restoration can be successful in reverting forest loss. Successful payment for ecosystem services (PES) systems and ecological fiscal transfers show that stakeholders (including small and large landholders and local

²⁸ Seymour and Busch, *Why Forests? Why Now?*

governments) react to incentives if they are perceived as sufficient when compared to business-as-usual land use practices.²⁹

Examples from Brazil and elsewhere demonstrate that public opinion can drive politics on forests. Both elements together could trigger the policy changes that are necessary to tackle illegality, reduce rent-seeking, improve governance and shift incentives towards forest protection. Moreover, law enforcement activities can be efficient in the short-term to reduce deforestation; however, once positive results are achieved, they need to be accompanied by long-term positive incentives to be sustainable, as local stakeholders' support to forest conservation is critical and it requires these actors to perceive conservation as in their self-interest. This cascade from incentives and public pressure to changing policy is expected to catalyze a shift in economic development pathways away from deforestation-intensive practices.

Box 2: Why Pay for Results?³⁰ The Development Case

A results-based payment system works optimally in the case where there are multiple different routes by which an outcome can be achieved. In this context, the jurisdiction for the policy decisions made by any individual country remains with the Government of that TFC. The TFFF aims to reward the final outcome, while ensuring that certain safeguards are in place for TFCs. These include establishing minimum allocations to key stakeholders and maintaining transparency regarding the overall policy and investment programs.

One of the key powers of TFFF is the ability to inform and influence TFCs' decision making both through its allocation from the Facility, but also through what the TFC foregoes because of its continued deforestation (discounts). This is not only a very visible metric for Governments but also informs the citizens of a country about the capital they have lost – linking foregone national income to deforestation that is less often perceived as valuable natural capital.

Importantly, the TFFF will not impact existing international mechanisms including REDD+, bilateral aid and zero-net deforestation commodity commitments. These mechanisms – which currently only provide a fraction of the global environmental value provided by TFCs to the rest of the world – will continue and will play an important role of providing the upfront investments required to achieve results unlocking access to the TFFF.

11.2. A Permanent Funding Vehicle

While the drivers of deforestation are different in every country, in all cases reversal and maintenance will require long-term policy choices. These can only be made by the visibility of long-term predictable financing.

The TFFF is unique in representing a permanent financing vehicle that is transparent to TFCs both in terms of its scale and its value. As set out above – Governments and their citizens will have clear

²⁹ Several cases pointing to this conclusion was analysed in the Payment for Ecosystem Services paper prepared by for the G20 Environment and Climate Sustainability Working Group deliberations by the Brazilian G20 presidency. Brazil. Ministry of Environment and Climate Change. Environment and climate sustainability: technical papers on adaptation finance, oceans, payment for ecosystem services and waste and circular economy – Brasília: MMA, 2024.

³⁰ de Nevers, Lay, Wolosin, and Bliss-Guest, Creating a Multilateral Wealth Fund for a Global Public Good: A Proposal for a Tropical Forest Finance Facility, CGD 2018.

transparency on what a country will receive and what has been foregone due to continued deforestation. This augments and complements current programs of REDD+ and the voluntary carbon markets, which are designed to drive immediate impact in the short and medium terms, while TFFF adds a long-term perspective and visibility to support sustained outcomes.

11.3. At a Scale to Make a Clear Impact

There have been multiple attempts to estimate the funding required to reorient economies in TFCs to exclude deforestation ranging from USD 500 billion to USD 750 billion per annum. The vast majority of these sums will need to flow from private finance. However, the private finance will only flow if the investment climate is conducive and is backed up with effective monitoring and enforcement mechanisms to maintain the new policy/regulatory environment. It is this catalytic capital [enabling implementation of such reforms] that the various programs of REDD+ and TFFF are seeking to provide.

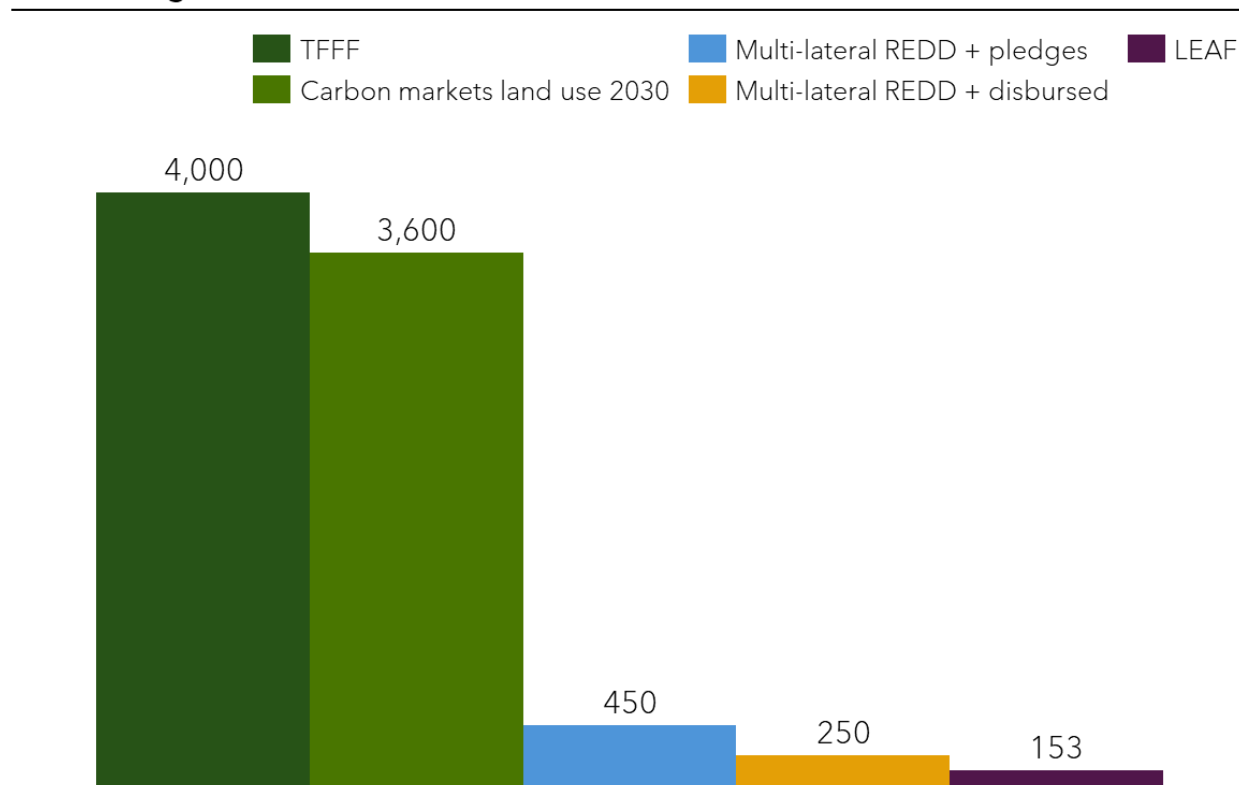
Table 7: Summary of financing needs identified in the literature

Source	Focus	Identified annual finance needs (USD billion/year)	
		by 2030	by 2050
WB	Climate change mitigation, biodiversity conservation and land restoration targets	N/A	536
UNEP	NbS	542	740
Climate Policy Initiative	AFOLU	423	N/A
2023 Forest Declaration Assessment	Reduce deforestation and implement restoration and sustainable forest management at scale	N/A	460

Available sources of funding are not close to addressing this gap, and as can be seen in Figure 13, the TFFF will represent a significant source of finance for forests compared to multilateral REDD+ pledges and disbursements, as well as the Lowering Emissions by Accelerating Forest Finance (LEAF) Coalition. It could even generate higher annual financial flows than those expected from the carbon markets by 2030.

Figure 13: Potential significance of TFFF relative to other sources of finance for forests

Potential significance of TFFF relative to other sources of finance



Source: World Bank estimate

Box 3: TFFF and Existing Forest Funding Mechanisms: The current and potential significance of REDD+ and carbon markets

To date, REDD+ (both readiness activities and results-based payments) has been financed mostly through multilateral funds including the Forest Carbon Partnership Facility (FCPF), the Forest Investment Program (FIP), the Amazon Fund, the Central African Forest Initiative (CAFI), the Green Climate Fund (GCF), the UN-REDD Program, the BioCarbon Fund and the Congo Basin Forest Fund (CBFF). It has been estimated that the multilateral REDD+ funds have pledged USD 6.4 billion (i.e., USD 400 million per year on average) for REDD+ activities since 2008, of which USD 4 billion (USD 250 million per year on average) have been approved for dedicated REDD+ activities up to February 2024³¹. In addition, the LEAF Coalition - a pool of buyers of jurisdictional-scale credits which intends to enable countries to access carbon finance and bring jurisdictional-scale REDD+ credits to markets - has gathered a total amount of financial commitments for the purchase of high-integrity emissions reductions credits of over USD 1.5 billion (which, to allow for comparisons of annual data from other sources, may be considered equivalent to USD 150 million per year, given that LEAF was launched in 2021 and that its objective is to halt tropical deforestation by 2030)³².

³¹ Climate Funds Update. Climate Finance Thematic Briefing: REDD+ finance. Charlene Watson, ODI, Liane Schalatek, hbs, and Aurélien Évéquoz. Heinrich Böll Stiftung, ODI. 2024. Available at: <https://us.boell.org/sites/default/files/2024-03/cff5-2024-eng-redd-digital.pdf>.

³² Leaf Coalition Commitments top \$1.5 billion at COP27. Emergent blogpost. Available at: [LEAF Coalition Commitments top \\$1.5 billion at COP27 - Emergent](https://www.emergent.org/leaf-coalition-commitments-top-1-5-billion-at-cop27-emergent).

Box 3: TFFF and Existing Forest Funding Mechanisms: The current and potential significance of REDD+ and carbon markets

Regarding results-based payments specifically, the GCF's pilot program made payments to eight countries for a total of USD 497 million from 2019 to 2020³³ (USD 248.5 million per year on average) while the FCPF Carbon Fund has paid USD 164.5 million to eight jurisdictional emission reductions programs to date³⁴, (an annual average of USD 54.8 million, considering that the first payment was made in 2022) both totaling USD 661.5 million.

Carbon markets have recently experienced a surge fueled by net zero and carbon neutrality pledges by companies, as well as by the inclusion of market instruments in the Paris Agreement through Articles 6.2 and 6.4. However, to date most of the financing for the forest sector from this source has been channeled through projects carried out in the context of the voluntary carbon market (VCM). In 2023, the market value of nature-based carbon credits in the VCM reached USD 381.5 million per year, down from the USD 1.2 billion reached in 2022 (and to the historical maximum of USD 2.1 billion registered in 2021) due, mainly, to quality issues associated with REDD+ projects. The cumulative value of the VCM since around 2005 has been estimated to be close to USD 10.8 billion.³⁵ Jurisdictional REDD+ program transactions in the voluntary market have so far been limited to Guyana's contract with oil developer Hess for USD 750 million between 2022 and 2032³⁶, of which USD 75 million were paid in early 2023 and an additional USD 75 million were expected to be transferred later in 2023.³⁷

Nevertheless, according to some projections³⁸, carbon markets (voluntary and regulated) could reach 728 million tCO₂ per year by 2030 equally split between the VCM and compliance markets, which could represent around USD 7.3 billion per year under a low demand, loose supply scenario (i.e., the most conservative scenario) in that year. If these projections become reality, the carbon market could become a significant source of finance, including for forestry and land use projects, which have historically led voluntary carbon market transactions (in 2023 they represented around 53% of the market value³⁹ despite the reduced demand due to, among other factors, the credibility crisis of REDD+ projects).

11.4. Enhance Cross-Government Collaboration on Fiscal and Governance Aspects of Forest Conservation

By enhancing interaction between Ministries of Finance, Environment and other line ministries – the TFFF could drive collaboration on forest governance, tenure and law enforcement, but also on fiscal issues, taxes, fees and subsidies that today impact negatively on forests. Fiscal policy

³³ Climate Funds Update. Climate Finance Thematic Briefing: REDD+ finance. Charlene Watson, ODI, Liane Schalatek, hbs, and Aurélien Evéquo. Heinrich Böll Stiftung, ODI. 2024. Available at: <https://us.boell.org/sites/default/files/2024-03/cff5-2024-eng-redd-digital.pdf>.

³⁴ Forest Carbon Partnership Facility Annual Report 2024. Available at: [fcpf fy24.annualreportforweb.pdf](https://fcpf.fy24.annualreportforweb.pdf).

³⁵ Forest Trends' Ecosystem Marketplace. 2024. State of the Voluntary Carbon Market 2024. Available at: [State of the Voluntary Carbon Markets 20240529 1.pdf](https://www.ecosystemmarketplace.com/reports/state-of-the-voluntary-carbon-market-2024/).

³⁶ REDD+ carbon credits. IPIECA blogpost. Available at: <https://www.ipieca.org/impact/action/redd-carbon-credits>.

³⁷ Government of Guyana. First Payment from Hess Corporation for Guyana-Issued Carbon Credits. 2023. Available at: [Guyana-Receives-First-Payments-Under-World-Leading-Carbon-Credit-Sales-Agreement.pdf](https://www.guyana.gov.gy/news/guyana-receives-first-payments-under-world-leading-carbon-credit-sales-agreement).

³⁸ Trove Research, MSCI. 2024. Presentation Carbon Markets – Focus on Demand. World Bank.

³⁹ Forest Trends' Ecosystem Marketplace. 2024. State of the Voluntary Carbon Market 2024. Available at: [State of the Voluntary Carbon Markets 20240529 1.pdf](https://www.ecosystemmarketplace.com/reports/state-of-the-voluntary-carbon-market-2024/).

reforms have the potential to reduce deforestation through lasting structural changes in countries with low levels of economic development, weak institutional arrangement, and agricultural sector focus. The large-scale facility is expected to be a sufficient incentive to tackle policy and governance policy reforms, including on illegal trade and organized crime.

For example, since the introduction of ecological fiscal transfers (EFTs) for forests in 2014, net loss of very dense or moderately dense forest cover in India is reported to have decreased by 51%. Finance ministries could boost the use of fiscal tools and instruments such as Intergovernmental Fiscal Transfers (IFTs), taxes, and budget allocations to include the elements of forest and biodiversity conservation to generate TFFF payments. This new source of incentive would also boost interest by political leaders to explore and utilize a broad range of domestic and international tools for conservation and for stronger resource governance.

11.5. Make Communicating the Deforestation Rate a Major Global Event

In Brazil, the annual communications of deforestation rates are important news events, which are widely broadcast, reported on and discussed in public media and in politics. In fact, it was public pressure that was responsible for giving the Brazilian Government the comfort that policy changes and other measures to curb deforestation will be backed by the population at large. This example supports the theory that an annual communication of deforestation rates needs to be made a public global event. It can ensure inclusion and participation of CSOs, public, and media to create necessary public pressure for the TFCs as well as TFFF itself. Linking national deforestation rates directly to the awarding (or failure to earn) significant funds would increase the power and relevance of such regular communication of those deforestation rates. Transparent and accountable ways to measure and communicate this data will be key to build trust in the facility and within the tropical forest countries, making the TFFF's annual forest cover communications an opportunity for public motivation.

These global events would also potentially offer a platform for participating countries to share their good practices and discuss technical challenges, encouraging regional and international partnership. It would create a window for the TFCs to seek technical assistance from development banks, to leverage private finance, and ultimately, to improve their performance in sustainable management of forests.

12. Risks and Risk Mitigation

12.1. Risks and Mitigation Actions

This section identifies risks and mitigation actions pertaining to the different aspects of the TFFF structure. The TFFF governance structure will be designed to manage on-going risks that will inevitably arise once TFFF implementation starts. Some of the key risks are summarized below:

12.1.1. Facility-related financial risks, including:

Table 8: Financial risks

<p>Failure to raise sufficient funds: TFFF model requires scale to be able to pay TFCs enough to protect the forest</p>	<p>TFFF can achieve its objectives with junior capital of USD25 billion. It is possible that TFFF can execute a first close followed by a second close to complete the junior capital tranche, but first close investors will need comfort that their initial contributions will indeed be followed. Detailed capitalization strategy has been developed by the Government of Brazil in dialogue with other actors, including strong focus on engagement of additional sovereign non traditional sponsors.</p>
<p>Financial returns below expectations</p>	<p>The TFFF will invest in a portfolio of long-dated fixed income assets which will have a defined yield giving visibility to the anticipated financial return. However, the model is vulnerable to swings in the valuation of its asset portfolio. This will be mitigated by hedging the underlying interest rate risk of the portfolio from the deleveraging nature of the structure (investment cashflows exceed payouts in the early years) and the presence of the junior capital tranche. In the event that the gearing (senior liabilities / assets) exceeds key thresholds (e.g. 90%), the payouts from the TFIF will start to be curtailed until the market normalizes. This should only occur in the case of a structural widening of all credit spreads due to a global liquidity event. Such events do occur, but are temporary, with a normalization resulting in a natural increase in assets values which will reduce the liability / asset ratio. TFIF's investment portfolio will also provide a risk-weighted cushion for the effects of inevitable, if low-level, deferrals or defaults in payments that can be expected to occur within a BB+ portfolio of investments over time.</p>
<p>Challenge to roll-over TFIF debt</p>	<p>This is mitigated by the targeted high rating for the TFFF senior notes, but in the event of market stress it can be expected that TFIF would face liquidity pressure. This is mitigated by maintaining a sufficient buffer of liquid assets (10-15%) to ensure that at a minimum the TFIF always has sufficient liquid cash to meet all payments due in at least 12 months. Furthermore, TFIF will always have the option to sell assets to deleverage the structure. To ensure that debt roll-overs are reduced in the early years, TFIF will seek to issue debt with an average life longer than that traditionally seen of multilateral organizations (e.g. 5+ years).</p>
<p>Temporary constraint on EMDE investments</p>	<p>In the event that there is a temporary global or regional financial market disruption that disproportionately significantly constrains the range of new instruments in EMDE, the TFIF will be permitted to temporarily re-allocate some investment funds to debt instruments from developed countries until the temporary constraints in EMDE have eased.</p>

12.1.2. Technical risks, including:

Table 9: Technical risks

Inaccurate data: No data systems are 100% accurate, and there have been extensive differences between existing global satellite-based deforestation products and national forest monitoring systems.	The TFFF will establish a set of minimum requirements for global and national proposed monitoring system. Globally accepted alternative systems will be available for TFCs whose national system does not meet the TFFF's minimum required standards.
Forest Monitoring provide by TFCs is contested by stakeholders	The TFFF Grievance and Redress (GRM) Mechanism will be in place so that stakeholders can contest data provided by TFCs, such as those on forest cover and deforestation rates.

12.1.3. Reputational and capture risks, including:

Table 10: Reputational and capture risks

Internal and External Stakeholder Risks: TFFF will be successful if it is perceived as complementary and its objectives are perceived as fair and provides a shared vision with other programs and national and international initiatives.	The Facility will need to keep all communication channels open and constantly be prepared to receive and entertain comments and inputs from outside parties, and to contribute to the success of others and act in a transparent way. The TFFF will need to make information public – both during preparation and implementation phases. Dialogue with different stakeholders is ongoing as part of the TFFF design.
Fiscal responsibility: in case the facility is successful, large amounts of resources will be made available to participating TFCs. This may put national treasuries under pressure, particularly in smaller economy countries.	The Facility will assess current support programs available to increase fiscal responsibility with regards to the additional funding made available by TFFF including benefit sharing mechanisms that might be taken up by receiving countries. Where absorptive capacity of TFCs is a serious concern, the TFC might consider a trust fund approach to receive payments.
Relationship with REDD+: There may be perception of overlap between REDD+ and TFFF,	This Concept Note clarifies the relationship between TFFF and REDD+ (see Annex 1). The Secretariat will continue communicating this to all stakeholders.

12.2. Comprehensive Review Post-Commencement of Operations

Three years after its commencement of operations, the TFFF will undertake a comprehensive review of its operations, including, but not limited to, its Eligibility Criteria and its risk management and mitigation, following which it will make such updates, as are indicted in the review.

13. TFFF Operationalization Pathway

The operationalization of the TFFF has three phases presented in this section.

13.1. TFFF Design to Date

13.1.1. Technical Deliberations

The Government of Brazil introduced the TFFF concept at COP 28 in Dubai, building on previous work conducted by the World Bank and the Center for Global Development (CGD). The concept was further elaborated in the TFFF Concept Note 1.0, which was shared with partner countries in July 2024 for further discussions and updates. These partner countries comprised of six sponsor countries (France, Germany, Norway, UAE, UK, USA) and five TFCs (Colombia, DRC, Ghana, Indonesia, Malaysia) – the TFFF Interim Steering Committee. Further conceptual discussions were held on the sidelines of the G20 Ministers of Finance and Central Bank Governors meeting in Rio in July 2024, and at a technical workshop held in September 2024 in Rio de Janeiro. Following that, three taskforces – Finance, Eligibility and Monitoring, and Governance – were established with participation of all Interim Steering Committee members to expand and enhance the concept in a collaborative and participatory manner. These taskforces met several times virtually to discuss technical elements of the concept. A technical workshop focused on Monitoring and Environmental Eligibility issue was held in Nairobi, Kenya in December 2024. All this led to the preparation of this Concept Note 2.0.

13.1.2. Engagement with Tropical Forest Countries

Engagement with TFCs was a central focus in 2024, with the taskforces playing a pivotal role in informing and involving TFCs in the TFFF development process. Bilateral meetings, such as those held during the G20 Environment Working Group in Manaus and in Rio de Janeiro, and the joint technical workshop on environment and financing criteria held in Nairobi, aimed to ensure TFCs' voices were heard and their concerns integrated into the design. These meetings provided a platform for detailed discussions on commitments, expectations, and the benefits of participation in the TFFF, fostering trust and consensus among all parties.

13.1.3. Dialogue with CSOs and IP&LCs

In 2024, an initial dialogue with CSOs was held in Brasília, convened by the Institute for Climate and Society (ICS) gather input from CSOs. A comprehensive plan for dialogue and engagement with CSOs and IP&LCs was prepared to collect broader feedback from these stakeholders in 2025. An initial engagement session with the Global Alliance of Territorial Communities (GATC), bringing together IPs leadership from different regions was held in February 2025, leading to the finalization of a comprehensive IP&LC engagement plan to be implemented in 2025 with the support of IPs leaders. In addition, the Brazilian Indigenous Peoples Ministry (MPI) is supporting the dialogue with leaders to enable the development of the Direct Financing Mechanism for Indigenous peoples and traditional communities. These efforts reflect the TFFF's commitment to transparency and collaboration, ensuring that NGOs, CSOs and IP&LCs play an active role in refining and validating the initiative's environmental and financial aspects.

13.1.4. Events Conducted Up to Date

- February 27, 2024: Exploratory technical workshop on the TFFF funding mechanism in São Paulo.
- April 17, 2024: Kick-off in-person meeting of the financing stream at the World Bank/IMF Spring Meetings.
- May 8, 2024: Kick-off in-person meeting of the environment stream at the UNFF in New York.
- June 19, 2024: Presentation of the TFFF concept to the G20 Environment and Climate Sustainability Working Group in Manaus, Brazil.
- July 24, 2024: Presentation of the TFFF concept at an in-person meeting on the sidelines of the G20 Minister of Finance meeting in Rio de Janeiro.
- September 11, 2024: Joint technical workshop of potential sponsor countries and TFCs focused on environment and financing criteria in Rio de Janeiro.
- September 2024: In-person meetings with private investors, philanthropies, and NGOs during New York Climate Week.
- October 2024: In-person sovereign meeting during the World Bank/IMF Annual Meetings.
- October 2024: Engagement at the Biodiversity COP16 in Colombia.
- November 2024: Engagement at Climate COP29 in Azerbaijan.
- December 2024: In-person technical workshop held in Nairobi with the participation of TFCs, potential sponsoring countries, and key technical partners.

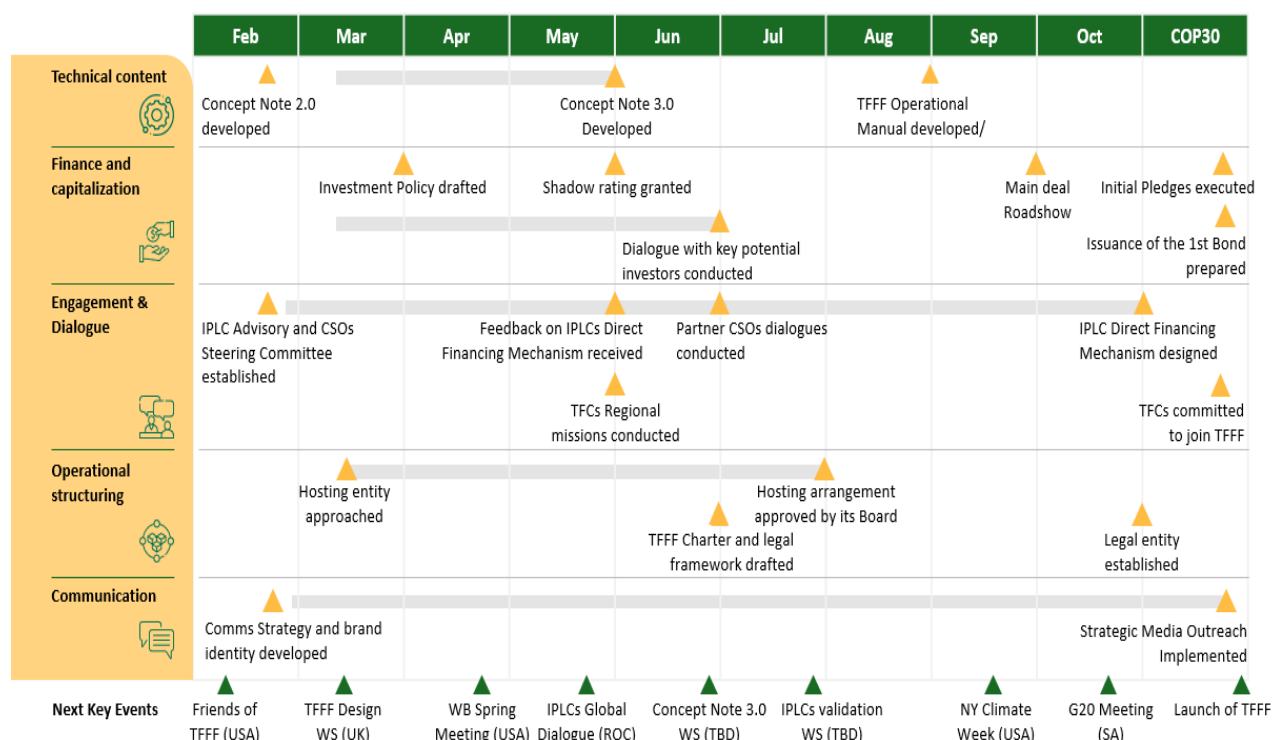
13.1.5. International Acknowledgements of the TFFF

The TFFF has been widely recognized as an innovative and transformative initiative, earning significant support and visibility among CSOs, TFCs, potential sponsor countries and the media. The TFFF was explicitly mentioned in the 2024 G20 Leaders' communiqué, underscoring its potential to reshape approaches to forest conservation and sustainable development.

The TFFF's presence in major global fora, such as UNFCCC COP28 and CDB COP16, further validates its importance as a groundbreaking alternative to traditional funding mechanisms. CSOs have praised its inclusivity and responsiveness to grassroots needs, while governments have acknowledged it as a strategic tool for addressing climate and biodiversity crises. The media has amplified its innovative approach, framing the TFFF as a beacon of hope for uniting diverse stakeholders in a shared mission to protect tropical forests and mobilize private capital at scale. This broad and growing recognition cements the TFFF's position as a critical driver of global environmental progress.

13.2. Next Steps

Figure 14: Next steps diagram



13.2.1. Phase 1 – July 2024 to March 2025 - Concept Design

During Phase 1, the TFFF Secretariat (for the design phase) and the three task forces were established (September 2024), with a primary focus on developing the core concepts of the TFFF. This phase will conclude in March 2025 with the completion of TFFF's core studies, consolidated in Concept Note 2.0, which will serve as the foundation for the fund's design. Upcoming milestones include:

- **Concept Note 2.0 Developed:** Incorporate the definitions and criteria developed by the finance, governance, and eligibility and monitoring taskforces.
- **Investment Policy Drafted:** Develop the principles, guidelines, and objectives that govern how the fund invests its capital.
- **IP&LC Advisory and CSOs Steering Committee established:** Establish a Technical Advisory Committee ('TAC') composed by CSOs, TFNs IP&LCs territorial organizations and networks and Territorial Funds to be involved in the TFFF Design process; and Establish CSOs steering committee that includes CI, WCS, TNC, Birdlife, IUCN, Campaign for Nature, ICS and Imaflores. Such committee should be aligned with the IP&LCs Direct Financing Mechanism TAC.
- **Hosting entity approached:** Submit a formal request to the potential hosting institution.
- **Comms Strategy and Brand Identity Developed:** Define communication objectives and key messaging for TFFF design phase, developing a stakeholder matrix to identify decision-makers and influencers and crafting a messaging guidebook to ensure consistent and

strategic narratives across all audiences; and finalize and launch the agreed Brand Identity, including logo and website development.

13.2.2. Phase 2 – March to COP30 – Facility Instruments Preparation and Capitalization

Phase 2 will focus on finalizing the details of the Concept Note (3.0) and establishing the operational framework for the TFFF. This phase will deliver the following key outputs:

- **Concept Note 3.0 Developed:** Concept Note 3.0 will be updated to include finalized technical parameters, as well as inputs from consultations with CSOs, IP&LCs, potential sponsor countries, TFCs and institutional investors.
- **TFFF Operational Manual developed:** The TFFF Operational Manual will be a comprehensive guide outlining the TFFF and TFIF's implementation strategies, based on their respective governance structures and financial mechanisms. It will include a set of rules and processes defining all key features of the TFFF operations, including eligibility, allocation of proceeds, monitoring, reporting etc.
- **Shadow rating granted:** Engage a rating agency to secure a shadow credit rating, strengthening investor confidence and bolstering the credibility of the TFFF framework,
- **Dialogue with key potential investors conducted:** Conduct roadshow focused on building relationship through bilateral engagement with key stakeholders or investors to understand preferences, concerns, and appetite. This roadshow should focus on potential sponsors, institutional investors and high-priority stakeholders.
- **Main deal roadshow:** Conduct a main roadshow to market the TFFF deal, secure commitments, targeting a broader set of committed investors, including those engaged during the previous dialogues with key potential investors.
- **Initial Pledges Executed:** Secure and execute initial pledges from potential sponsors.
- **Issuance of the 1st bond prepared:** Prepare the first TFIF Bond for issuance.
- **Feedback on IP&LCs Direct Financing Mechanism received:** Gather feedback and inputs for design of the direct financing mechanism from TAC members through events and bilateral meetings.
- **TFCs Regional missions conducted:** Conduct missions in the three regions focused on strengthening the engagement of TFCs. Objective is to align priorities, address questions, and strengthen collaboration, to build consensus and ensure engagement from all stakeholders.
- **Partner CSOs dialogues conducted:** Organize regional and global meetings with the Technical Advisory Committee to co-design the Mechanism.
- **IP&LC Direct Financing Mechanism designed:** Conduct analysis and develop principles and objectives of potential delivery mechanisms that could be used by participating TFCs. Propose governance and M&E arrangements as well as facilities/partners able to provide technical assistance. This will include workshops, bi-lateral meetings, etc.
- **TFCs committed to join TFFF:** Commitment from the Tropical Forest Countries to be part of the TFFF.

- **TFFF Charter and Legal framework drafted:** Draft the TFFF and TFIF Charters, along with associated legal agreements, covering participation, contribution, and hosting arrangements.
- **Hosting arrangement approved by its Board:** Finalize definition of hosting arrangements working in close collaboration with the potential host and culminating with the board approval of the potential host.
- **Legal entity established:** Set up legal entity enabling functioning of the TFIF.
- **Strategic Media outreach implemented:** Implement a comprehensive media outreach strategy, including press releases, interviews, and media partnerships, to amplify the TFFF's visibility and influence.

13.2.3. Phase 3 - After COP30 - TFFF Operationalization

The TFFF operationalization phase will start after COP30 and focus on issuing its first bond and complementing capitalization efforts by engaging institutional private investors, ensuring a diversified and robust capital structure. It will also start engaging with TFCs to assess their eligibility to join the Facility.

14. Annex 1: The TFFF and its Relationship with REDD+

14.1. Differences between REDD+ and the TFFF approach

REDD+⁴⁰ was agreed upon by Parties to the UNFCCC as a framework under which developing countries may voluntarily contribute to mitigation actions in the forest sector through a phased approach beginning with the development of national strategies, followed by the implementation of national policies and measures and results-based demonstration activities including consideration of agreed social and environmental safeguards, and evolving into fully measured, reported and verified results-based actions. REDD+ activities can be implemented at the national and (as an interim measure) subnational levels, and their results are expressed in tonnes of carbon dioxide equivalent per year. The UNFCCC Framework also considers the provision of financial and technical support and capacity building to address the needs of participating countries in each of the phases of REDD+. In practice, on top of the UNFCCC decisions, additional requirements have been applied for the provision of results-based payments under the GCF.

The UNFCCC provisions have served as the basis for the development of other jurisdictional REDD+ standards programs, such as the FCPF Standard and ART TREES, as well as for bilateral and multilateral results-based payments agreements.

While REDD+ and TFFF share some key features, such as offering incentives for large-scale forest protection and providing results-based payments, there are some important differences between them, as shown in Table 11 below.

Table 11: Main differences between jurisdictional REDD+ and TFFF

Factor	REDD+	TFFF
Eligible countries	Countries/jurisdictions having in place a REDD+ strategy, a FREL, a national monitoring system, and a safeguards information system.	Tropical moist forests in low- or mid-income countries, where annual deforestation rate below a certain threshold (determined by application of discounts) based on the remaining forest in the previous year. Once participating in the program, deforestation should not increase by more than [proposed as 0.1%] on a year-over-year basis. Adoption of a transparent and reliable method of measuring native forest cover. A transparent and inclusive mechanism to receive and allocate resources is required.
Scope	National and subnational	National (only covering eligible biomes).

⁴⁰ Note that references to REDD+ throughout this document refer to jurisdictional REDD+ unless stated otherwise.

Factor	REDD+	TFFF
Eligible activities	Activities that reduce emissions and enhance removals	Payment for ecosystem services.
Metric for RBP	tCO ₂ e	Area (ha) of tropical moist forest (payment), deforestation and forest degradation minus discounts linked to deforestation and degradation.
National strategy	Required.	Not required.
Monitoring	National and subnational systems Based on a combination of remote sensing and ground-based forest carbon inventory approaches.	Approved national systems or third-party systems. Based on satellite observation.
Benchmark for results	Forest Reference Emissions Level (FREL).	Previous year's forest cover.
Safeguards reporting	Required.	Not required.
Forest definition	Country-specific.	Fixed. A forest is made up of trees with at least 20% crown cover, and trees that are higher than 5 meters. The area with tree monocultures, or under afforestation would not be considered for the purpose of payments.
Independent assessment of elements and results	Technical assessments and analyses under the UNFCCC/third party validation and verification required to obtain results-based payments or access carbon markets.	The satellite monitoring will be available for independent verification.
Reversals	Safeguard (UNFCCC), addressed through buffers (FCPF, TREES).	No reversals, but countries are not allowed to increase deforestation rates.
Benefit sharing	Required.	Payments go to national budget or public funds. Requirement that a percentage will go to IP&LCs.

Factor	REDD+	TFFF
Carbon rights/ transfer of title	Required for markets and some RBPs.	Not required.
Readiness support	Usually provided (GCF, FCPF).	Not considered.
Reporting requirements	FREL to be presented to UNFCCC for technical assessment. Results presented as REDD+ Annex to the Biennial Update Report or Biennial Transparency Report and subject to technical analysis/Program description document and periodic monitoring reports.	Country to disclose information about national economic and environmental programs expected to benefit from forest payments without explicit tracking of proceeds.

It is important to note that countries that wish to access carbon markets, which could potentially represent the bulk of available finance, would have to meet the requirements of the applicable market standards. The main independent standard for jurisdictional REDD+ is ART-TREES. ART-TREES requires subnational programs to move to national scale by 2030 and mandates crediting levels to be revised every five years, considering a moving window of five years, i.e. the monitored emissions performance of the program in the previous crediting period becomes the new crediting level, but with the important condition that crediting levels can never increase from one crediting period to the next. This will lead countries to reach zero deforestation and degradation reference levels sometime in the near future (i.e., from that point on, programs would not be able to credit emission reductions from deforestation and degradation), which means that they would only be able to generate carbon credits (and obtain resources) from forest carbon enhancements. Crediting enhancements, in its part, is also time-bound, as countries can't increase reforestation and regeneration rates permanently.

In summary:

While sharing the same general objective, i.e., incentivizing the large-scale protection of forests, REDD+ and the TFFF have significant differences. A key distinction between them is that, while REDD+ focuses on emissions and removals compared to a reference level, and is activity-based, the TFFF is based on areas of forest and their fluctuations from one year to the next. Likewise, the TFFF does not require reporting on safeguards, transfer of title, demonstration of carbon rights, or third-party assessments of the results, all of which are usually necessary under REDD+.

Moreover, the TFFF does not consider offering readiness support, whereas significant funds have been channeled for this purpose under REDD+.

Independent standards include additional requirements for countries to be able to access markets. These include ambitious criteria that intend to increase country ambition with time and

achieve net-zero emissions from forests in the near future, which means that access to carbon market finance is time-limited.

14.2. Complementarities between the REDD+ and the TFFF approach

Potential complementarities and overlaps are better understood by analyzing the situation of countries and jurisdictions at different stages in the forest transition curve⁴¹. As seen in Figure 15, REDD+ incentives may be particularly attractive for High Forest High Deforestation (HFHD) and Low Forest High Deforestation countries (LFHD) countries, where annual changes in forest cover are negative and high (e.g. above -0.75%/year), potentially leading to a high volume of emission reductions.

Low Forest and No Deforestation (LFND) countries, where forest areas are being enhanced, there could also be an incentive under REDD+ but only linked to enhancement of carbon stocks (e.g. restoration, afforestation/reforestation), whereas for reducing emissions from deforestation and forest degradation there would be no potential for REDD+ result-based payments.

REDD+ results-based payments are not available for countries where forests are stable, and remain limited for High Forest Low Deforestation (HFLD) countries where emissions from deforestation and degradation are expected to increase in the future, but for which there are no widely accepted methodologies to produce forest loss projections, which has led to controversies about the quality of the ensuing verified emission reductions, particularly when used for offsetting purposes.

LFND and HFLD jurisdictions and those with stable forests⁴² represent, consequently, areas of opportunity where the TFFF payments could clearly complement REDD+ incentives. Examples of such jurisdictions are Gabon and Costa Rica. Moreover, transitions from REDD+ to TFFF could take place in countries where deforestation and degradation rates have been controlled with the help of REDD+ incentives that now require additional finance to maintain their forests stable, which is not available from REDD+ but could come from the TFFF, i.e. country moving from HFHD/LFHD to HFLD/LFLD.

14.3. Addressing potential “double dipping” or “double finance”

As can also be observed in Figure 15, countries where the change in forest cover rate ranges between zero and -0.75/year (i.e., those meeting the Eligibility Criteria of TFFF) could potentially benefit from REDD+ and TFFF payments at the same time, which may cause concerns about potential double payment (or “double dipping”). However, these payments are expected to occur during a short transition period to low-deforestation, and in any case, considering the significant gap between current and required financing levels outlined in the previous section, and the fact that double payments do not represent an environmental integrity problem, as well as the

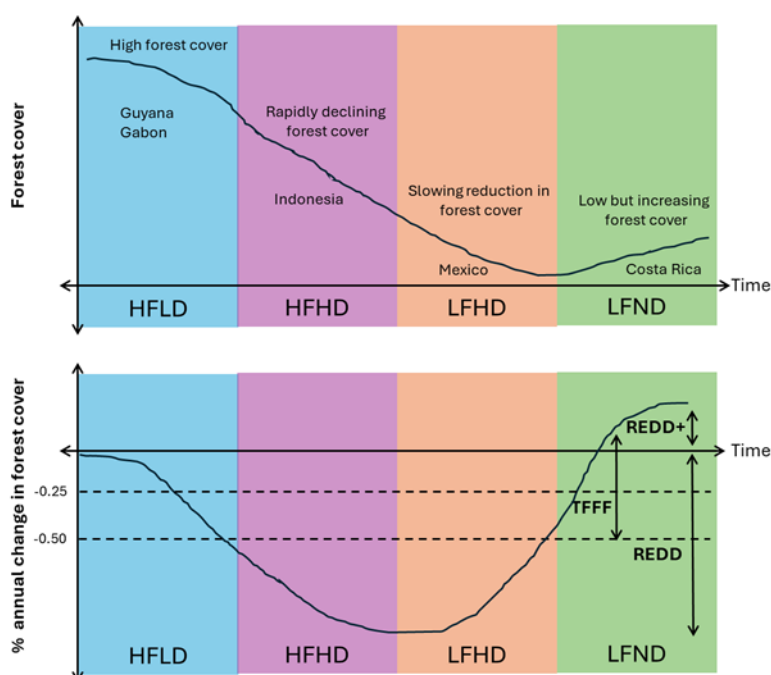
⁴¹ The forest transition theory describes a body of interdisciplinary social scientific environmental research that explores the dynamics of how forest cover has historically declined and then expanded because of population growth, urbanization, industrialization, and globalization. (Source: Bennett, Brett M., and Gregory A. Barton, 'Forest Transition Theory', in Jeannie Whayne (ed.), *The Oxford Handbook of Agricultural History*, Oxford Handbooks (2024; online edn, Oxford Academic, 21 Mar. 2024), <https://doi.org/10.1093/oxfordhb/9780190924164.013.37>, accessed 6 Dec. 2024).

⁴² For a more detailed discussion on stable forests see: [Full article: Securing the climate benefits of stable forests.](#)

relatively low prices/payments currently available, this “double dipping” may be seen as an opportunity for countries to access additional resources to enhance their activities in the forest sector and to increase their climate ambition, rather than a problem.

It may also be argued that for countries with low deforestation rates, the potentially small benefits from REDD+ may not justify covering the transaction costs of complying with existing standards and requirements and undergoing the usually lengthy processes involved, thus they may choose to participate only in the TFFF if it is easier to access.

Figure 15: Opportunity areas for REDD+ and TFFF in the forest transition curve



14.4. Addressing potential double counting and additionality

Double counting (i.e., a situation where emission reductions or removals are counted more than once towards achieving mitigation targets) is not possible between the TFFF and REDD+. The TFFF is not based on GHG, but on areas, and does not create any type of unit (either representing emission reductions/removals or areas). Moreover, REDD+ payments usually imply the transfer of title to the emission reductions to the payer/buyer, while under the TFFF no similar requirements exist – the payments would be made against an approved monitoring report.

Another possible concern relates to the potential of TFFF payments to affect the additionality of REDD+ programs under carbon standards. This would imply that once a program receives payments from the TFFF, these resources would be invested in activities to further reduce deforestation making all or part of the resulting emission reductions not eligible for REDD+ crediting because they would have happened anyway in the absence of REDD+ incentives. There are a number of considerations to take into account regarding this argument:

Although the potential significance of TFFF Forest Payments may be relatively high compared to REDD+ implementation costs, most probably – as shown by the gap estimates presented in

previous sections – they will represent but a fraction of such costs for most countries, so it is unlikely that the TFFF could render REDD+ programs non-additional.

The requirement included by most jurisdictional standards that the FREL needs to be reassessed periodically (usually, every five years) means that the potential reduction of emissions due to TFFF Forest Payments would become reflected in a subsequent revised FREL in the short term, so, even assuming that such payments may affect the additionality of REDD+ programs, their impact would be limited.

In summary:

- TFFF may serve as a complementary source of finance for countries with relatively low rates of deforestation (HFLD and LFLD), which may have limited access to REDD+ results-based payments, or stand as an alternative source in countries with stable forests where no additional emission reductions or removals take place.
- Although some countries (those with forest cover rates below -0.75%/year) may be able to receive incentives from both TFFF and REDD+, this wouldn't have negative environmental consequences and may allow such countries to further their mitigation actions and increase their climate ambition.
- Double counting is not possible between REDD+ and the TFFF, given that the latter does not result in the issuance of any type of unit and the reception of payments does not imply the transfer of any kind of title.

14.5. Potential synergies between REDD+ and the TFFF

REDD+, through its different phases, has created capacities and generated lessons learned in many areas that can serve to facilitate the implementation of the TFFF, for instance:

- REDD+ strategies and investment plans, and related institutional and regulatory arrangements, could be a comprehensive framework to enable countries to smartly invest the proceeds from the TFFF.
- Monitoring and reporting systems put in place for REDD+ may be used to monitor performance under the TFFF (if they comply with the minimum requirements). So far, over 60 countries have reported to the UNFCCC on forest data, including areas of forest, deforestation and forest degradation which is testament of the level of operationalization of the national forest monitoring systems supported by REDD+ readiness.
- Benefit sharing mechanisms (including institutional arrangements) established to distribute REDD+ benefits can be used for TFFF purposes.
- Lessons learned from RBP programs may be useful while refining the eligibility criteria and requirements for the TFFF, to make them credible and, at the same time, flexible enough to allow for a substantive participation of countries.