SCALING BIG FINANCE FOR NATURE-BASED SOLUTIONS TO SAFEGUARD THE AMAZON: A ROADMAP FOR ACTION

RECOMMENDATIONS TO THE BRAZILIAN PRESIDENCY OF THE UNFCCC CONFERENCE OF THE PARTIES (COP30), BELÉM, BRAZIL

The world's three great tropical forest regions - the Amazon, the Congo Basin, and Southeast Asia's rainforests - form the ecological foundation of Earth's climate stability and biodiversity¹. Though they cover only about 7% of Earth's land surface, these rainforests harbor nearly two-thirds of all terrestrial species and contain approximately 68% of the global carbon stock in their biomass². Their role in sequestering carbon, stabilizing rainfall patterns, and supporting ecosystem-based adaptation is unparalleled.

These forests act as carbon sinks and biodiversity strongholds, while sustaining hundreds of millions of people. The Amazon alone stores an estimated 150–200 billion tons of carbon - equivalent to 15–20 years of global CO_2 emissions³ - and is home to 13% of known plant and animal species⁴. The Congo Basin, the second-largest rainforest in the world, absorbs 1.1 billion tons of CO_2 annually - about 4% of global emissions - and supports over 40 million people in some of the world's most vulnerable development contexts⁵. Southeast Asia is home to nearly 15% of the world's tropical forests and includes at least four of the 25 most important global biodiversity hotspots⁶.

These vital ecosystems are now reaching critical thresholds. In the Amazon, scientists warn that losing just 5% more of the forest could trigger an irreversible tipping point, converting vast areas into a degraded savanna (Nobre, Encalada et al., 2021; Lapola et al., 2023). The Congo Basin has already lost over 6 million hectares of humid primary forest since 2001, with land-use change emerging as the region's primary source of greenhouse gas emissions (Central African Forest Initiative, 2023). In Southeast Asia, deforestation is among the highest globally, averaging 1 million hectares per year between 2020 and 2025. More than 90% of the region's forests were still unprotected as of the early 2000s, raising fears that over 40% of Southeast Asia's biodiversity could vanish by 2100 (Global Forest Watch; Estoque et al., Nature Communications, 2019).

The degradation of these tropical forests would have planetary consequences - destabilizing the rainfall regime, accelerating species extinction, and undermining the global fight against climate change. COP30 in Belém - the first UNFCCC COP hosted in a tropical forest - offers a historic opportunity to elevate a unified global agenda for the world's major forest basins. The Brazilian Presidency can forge new coalitions for finance, science, and governance among tropical forest countries. While this roadmap focuses deeply on the Amazon as a keystone biome, it does so with a global lens, recognizing that safeguarding one tropical forest reinforces the resilience of all others.

- 1 CBD Technical Series No. 41 (2009) "Connecting Biodiversity and Climate Change". cbd-ts-41-en.pdf
- 2 Estoque et al., Nature Communications, 2019. The future of Southeast Asia's forests | Nature Communications
- 3 Flores et al., Nature (2024). https://doi.org/10.1038/s41586-023-06970-0
- 4 "Scientific Framework to Save the Amazon", 2019. https://www.conservation.org/docs/default-source/brasil/ascientificframeworktosavetheamazonfinalversion.pdf
- 5 Central African Forest Initiative, 2023. Why Central African Forests? | Central African Forest Initiative (CAFI)
- 6 Estoque et al., Nature Communications, 2019.

THE ROLE OF THE AMAZON RAINFOREST

Spanning nine countries⁷, the Amazon rainforest encompasses 6.5 million square kilometers, being Earth's largest tropical forest, home to 13% of known species of plants and animals, 20% of its freshwater, and 47 million people, including more than 400 Indigenous groups whose livelihoods and cultures are inextricably tied to the forest⁸. It stands as a cornerstone of global climate stability, biodiversity, and human well-being. These communities coexist with the Amazon. While rural communities depend on the forest for their sustenance, health, and homes, and serve as its guardians through ancestral knowledge and sustainable practices, urban communities also play a crucial role in shaping the region's economic and environmental dynamics. However, both face mounting challenges from deforestation, climate change, and socio-economic marginalization. For instance, climate-induced droughts and fires not only threaten the forest but also disrupt vital water sources and food systems, deepening poverty and driving displacement.

Beyond its ecological greatness, the Amazon regulates the transboundary, regional hydrological cycle: its evapotranspiration generates "flying rivers" that supply 50% of South America's rainfall⁹, sustaining agriculture, hydroelectric power, and economies across the continent. The Amazon basin is the largest river system in the world, originating mainly in the Peruvian Andes. The longest rivers in the world that still maintain their free flow, such as the Marañón, Ucayali and Napo, flow into this basin. These rivers play a fundamental role in connecting the Andes with the Amazon, thus constituting natural biological corridors for migratory species such as the pink dolphin, the golden catfish and river turtle¹⁰. Brazil alone derives 66% of its electricity from hydropower, much of it reliant on Amazonian rainfall¹¹. Yet this irreplaceable biome teeters on the brink of collapse. Deforestation and degradation, driven by cattle ranching, soy cultivation, and illegal logging, have already claimed 17% of the forest in Brazil¹² (and 15% over all Amazon), with another 31% degraded¹³. Every year, 30% of deforestation occurs in Undesignated Public Forests (56 million hectares in the Brazilian Legal Amazon¹⁴), driven by land grabbing. A growing area has been burned during the dry season¹⁵, accelerated by human activities like cattle ranching and exacerbated by climate-induced droughts and heatwaves. Scientists warn that losing just 5% more risks triggering an irreversible tipping point, converting vast swaths of the forest into an open-canopy, highly degraded dry savanna. This process can also be triggered if global warming exceeds 2°C.Such a collapse would devastate biodiversity, disrupt rainfall patterns critical to global food production, and release catastrophic amounts of carbon. Alarmingly, current financial flows fall far short of averting this crisis. While the World Bank estimates that \$7 billion annually is needed to protect the Amazon, only \$5.81 billion has been mobilized from 2013 to 202216. Yet, the Amazon forest generates at least an annual value of US\$317 billion per year¹⁷. This funding gap reflects a broader global failure: nature-based solutions (NbS) receive a mere 3% of climate finance for mitigation and

⁷ The vast Amazonian territory is shared between several countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela, and French Guiana, an overseas territory); beyond the physical limits, the social and political contexts have a direct influence on the conservation of the ecosystems it contains.

^{8 &}quot;Scientific Framework to Save the Amazon", 2019.

⁹ Nobre et al., Science Advances (2016). https://www.pnas.org/doi/full/10.1073/pnas.1605516113

¹⁰ Conservación de biodiversidad de agua dulce en la Amazonía peruana | The Nature Conservancy

^{11 &}lt;a href="https://www.eia.gov/todayinenergy/detail.php?id=49436">https://www.eia.gov/todayinenergy/detail.php?id=49436

¹² Carlos Nobre highlights that deforestation in the Brazilian Amazon has reached approximately 840,000 km², equivalent to 22% of the forest's area. Additionally, selective logging and the spread of fires have degraded 37% of the region. Of the deforested land, around 160,000 km² have been abandoned by livestock, allowing secondary forests to regenerate.

¹³ Lapola et al., Nature (2023). https://www.science.org/doi/10.1126/science.abp8622

¹⁴ Azevedo-Ramos et al., (2020). https://www.sciencedirect.com/science/article/pii/S0264837720302180

¹⁵ Alencar et al. (2022), bit.ly/3Bn5ewU

The \$7 billion annual funding gap for the Amazon is derived from midpoint estimates in peer-reviewed studies (e.g., Flores et al., 2024) and institutional analyses (World Bank, 2021; UNEP, 2023), reflecting the scale of investment needed to halt deforestation, restore degraded lands, and support Indigenous and local communities. From 2013-2022, current flows average \$581 million/year, highlighting the urgent need for increased ambition.

¹⁷ World Bank Blog (2023). How much should we pay to preserve the Amazon? https://blogs.worldbank.org/en/latinamerica/how-much-should-we-pay-preserve-amazon

11% for adaptation, ¹⁸ despite offering 30% of the mitigation needed by 2030¹⁹.

Economically, Amazon's value extends far beyond timber or agricultural land. Its ecosystem services-carbon storage, water regulation, biodiversity protection, pollination, and disease control-are estimated to be worth trillions annually²⁰ (specifically, the Amazon rainforest is valued at approximately USD \$317 billion annually for its ecosystem services and biodiversity in Brazil alone²¹). For instance, the forest's role in stabilizing rainfall underpins \$3 trillion in South American agricultural output²². However, these services remain undervalued in policy and markets. Meanwhile, financial flows often incentivize deforestation: in 2021-2022, 89% of climate finance for agriculture and land use contradicted sustainability goals²³. Bridging this gap requires redirecting capital flows toward scalable actions focused on reducing deforestation while boosting sustainable livelihoods.

For over 65 million years, Amazonian forests remained relatively resilient to climatic variability. Now, the region is increasingly exposed to unprecedented stress from warming temperatures, extreme droughts, deforestation and fires, even in central and remote parts of the system²⁴. The Amazon's long-standing natural feedback cycles, which sustain its ecological balance, are being supplanted by destabilizing forces that erode ecosystem resilience and elevate the risk of irreversible tipping points. Safeguarding the forest's resilience in the Anthropocene hinges on dual imperatives: conserving at least 80% of the Amazon biome (Lapola et al., 2023), local action to stop deforestation and forest fires, reverse degradation, scale restoration, implement a bioeconomy based on the sociobiodiversity (Nobre, Encalada et al., 2021²⁵), and global collaboration to rapidly reduce greenhouse gas emissions with adequate financial input. Only through this integrated approach can the Amazon's capacity to adapt and regenerate be preserved, guaranteeing its ecological balance and the improvement of the lives of those who call it home.

SUCCESSFUL CASES DRIVING IMPACT IN THE AMAZON

Scaling big finance for the Amazon touches three interconnected strategies: substantially increasing **Conservation Finance**, which prioritizes ODA and philanthropic funding for conservation and restoration, **Greening the Economy** causing deforestation and ecosystem degradation, which reorients economic systems toward sustainability, and **Strengthening Capacity and Means of Implementation** to ensure governance, technical expertise, and institutional frameworks can deliver lasting impact. Together, these approaches address the biome's ecological fragility while fostering inclusive growth.

Closing the Amazon funding gap is urgently needed to avoid reaching a tipping point. This requires achieving key targets, including conserving 331 million hectares within Indigenous territories and protected areas, bridging a 185 million-hectare gap to maintain at least 80% of the biome intact, and restoring 600,000 square kilometers of degraded forests at scale. These targets are critical for ensuring the long-term health of the Amazon ecosystem and meeting global climate goals.

Conservation finance plays a crucial role in channeling resources to safeguard ecosystems and Indigenous rights. Initiatives like the **Amazon Region Protected Areas Program (ARPA)** have achieved significant conservation milestones, supporting over 59 million hectares of

¹⁸ Climate Policy Initiative, Global Landscape of Climate Finance (2023). https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/

¹⁹ UNEP, State of Finance for Nature (2023). https://www.unep.org/resources/state-finance-nature

²⁰ Costanza et al., Global Environmental Change (2014). https://doi.org/10.1016/j.gloenvcha.2014.04.002

²¹ A preserved Amazon rainforest worth USD \$317 billion per year: World Bank - Brazil Reports

²² World Bank, Economic Value of Amazon Rainfall (2022).

²³ Climate Policy Initiative. Global Landscape of Climate Finance (2023).

²⁴ Flores et al., Nature (2024).

²⁵ Nobre, Encalada et al., 2021. The Amazon Assessment Report. <u>www.sp-amazon.org</u>.

protected areas in Brazil alone²⁶, yet require substantial and sustained funding to maintain and expand its conservation efforts²⁷. Patrimonio del Perú (Phase 1) safeguards 18 million hectares of Peruvian Amazon, while Herencia Colombia has expanded protected areas in Colombia's Amazon by 8 million hectares. Similarly, the **Amazon Sustainable Landscapes (ASL)** initiative has restored 48,500 hectares of degraded land, and facilitated the creation/expansion of 4.4 million hectares of protected areas²⁸, demonstrating scalable models for conservation and restoration. However, financing these programs remains fragmented: for instance, REDD+ mechanisms have mobilized an average of \$200 million annually from 2013-2022 in the Amazon ²⁹ Several initiatives have attempted to direct access finance for Indigenous Peoples and Local Communities (IPLCs), however much more is needed to meet the \$7 billion annual funding gap identified by the World Bank. An outstanding example is the Podaali Fund, which is the first indigenous-led fund in the Amazon.

Critically, Conservation Finance must address systemic challenges. For example, The New Collective Quantified Goal on Climate Finance under the Paris Agreement –-calls for \$1.3 trillion in global climate finance annually, yet the Amazon-specific allocation remains unclear. Strengthening safeguards and implementing a human rights-based approach, such as land tenure security and IPLC inclusion and respect of their governance structures, is essential to ensure funds reach frontline communities and avoid misuse. Equally critical is building institutional capacity – training governments to manage funds transparently, scaling monitoring and traceability technologies, and empowering Indigenous peoples and local communities with technical and financial tools to steward their lands.

Greening the Economy targets means changing the economic drivers of deforestation by aligning markets, finance and enabling policies with sustainability. A great example is the **Soy Moratorium**, a market instrument that helped reduce deforestation by 80% in the Brazilian Amazon³⁰. Expanding such models across all Amazonian countries for forest risk commodities – coupled with full traceability tools could decouple agriculture and livestock from forest loss. Already, **Pará** committed to achieving 100% traceable cattle by 2026 as part of its strategy to halt deforestation. Pará's example is Brazil's **first mandatory cattle traceability programme**³¹. It aims to transform the entire global beef value chain and decouple habitat loss from production by eliminating deforestation and conversion from the supply chain while increasing productivity and market access for smallholder farmers. Another great initiative driving financial sector change is, the **Innovative Finance for the Amazon, Cerrado, and Chaco (IFACC)**, which has mobilized \$4.6 billion of its \$10 billion target to finance deforestation-free supply chains, proving that private capital can support sustainable agriculture.

Yet systemic barriers persist. Across agriculture, forestry, and fisheries, environmentally harmful incentives continue to dwarf investments in nature. Redirecting these financial flows and incentives is critical to scaling sustainable alternatives like agroforestry, sociobioeconomy of standing forests and flowing rivers, community-led forest management, low-impact aquaculture, conservation of protected areas, sustainable use of biodiversity, monitoring and research, strengthening of Indigenous Peoples and local communities, among others. Ecuador's \$1.53 billion Amazon debt conversion offers a blueprint, channelling funds away

²⁶ The Amazon Protected Areas Program (ARPA): participation, local development, and governance in the Brazilian Amazon | Biodiversidade Brasileira

²⁷ ARPA Annual Report (2023). http://arpa.mma.gov.br/en/

²⁸ World Bank, ASL Progress Report (2023). https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099071024233013642/p17360217916890771a9561dd368233f9ca

²⁹ UN-REDD Programme (2023).

³⁰ Gibbs et al., Science (2015). https://doi.org/10.1126/science.aaa0181

^{31 &}lt;u>Brazilian state launches mandatory tracking of cattle to stop deforestation | Reuters</u>

from ecologically damaging debt servicing into conservation and regenerative livelihoods³². The transaction will also secure approximately \$460 million to support the **Amazon Biocorridor Program (Programa Biocorredor Amazónico, BCA)** for the conservation of terrestrial and freshwater ecosystems in the Ecuadorian Amazon³³. To succeed, such efforts require robust local capacity: training IPLCs in sustainable practices, strengthening their governance systems and authorities to enforce environmental legal and public frameworks, and building financial mechanisms' to channel blended finance effectively. Efforts to protect free-flowing rivers in the Amazon basin include an innovative example of planning in the Marañón Basin that evaluates hydropower development scenarios and renewable energy zoning to safeguard free-flowing rivers in the Andean Amazon, promoting a replicable model to redirect finance for sustainable infrastructure, clean energy and conservation integration.

The interplay between Conservation Finance, Greening the Economy, and Capacity Building is vital. For instance, high-integrity carbon markets – if governed by frameworks like Article 6 of the Paris Agreement – could link conservation revenues to national climate targets (NDCs) and biodiversity strategy and action plans (NBSAPs). Yet, a full regulation is still needed. Blended finance models, such as IFACC's mix of public and private capital, demonstrate how de-risking investments can attract large-scale funding. Regional coordination through the Amazon Cooperation Treaty Organization (OTCA) and the Belem Declaration will be critical to harmonize these efforts, ensuring that financial flows align with a unified vision for the Amazon.

To meet the urgency of the Amazon crisis, existing efforts must be amplified by ambitious, scalable solutions in line with the biome's global significance. While initiatives like IFACC and debt-for-nature swaps demonstrate progress, they remain insufficient against the scale of deforestation and funding gaps. There is a need for greater innovation in terms of financial mechanisms to unlock private sector financing. The forthcoming Tropical Forest Forever Facility (TFFF), designed to mobilize up to \$125 billion for all tropical forests by 2030 through blended finance mechanisms, exemplifies the type of transformative action required. Such models rooted in scalability, science-based targets, and partnerships-can bridge the gap between incremental progress and systemic transformation, ensuring that finance aligns with the biome's role as a global climate stabilizer.

There is also a significant role to be played at the subnational level. Amazonian cities can serve as key players in protecting nature by leveraging innovative financial mechanisms such as urban biocredits. These mechanisms not only promote climate resilience but also enhance the overall well-being of urban residents by improving air quality, reducing heat, and ultimately creating fiscal space while increasing municipal financing flexibility.

OUR ASK TO THE PRESIDENCY

The \$1.3 trillion goal calls on "all actors" to mobilize funding from diverse sources - including philanthropic funds, the private sector, and public institutions. We urge Brazil **to engage philanthropic organizations and private sector investors to commit funding that supports nature conservation and the Amazon biome**. This initiative would contribute to the \$1.3 trillion target while advancing the objectives of the Baku-Belem Roadmap.

Developed countries have agreed to lead efforts by contributing \$300 billion of the \$1.3 trillion goal through various funding sources. Some of these nations could **join a coalition**

³² Ecuador Announces Its First Debt Conversion to Support Terrestrial and Freshwater Conservation in the Amazon, Supported by TNC's Nature Bonds Program

³³ The Amazon Biocorridor Program, a management model for effectively conserving the Ecuadorian Amazon region, aims to improve the management of 4.6 million hectares of existing protected areas and protect an additional 1.8 million hectares of forests and wetlands. This model will also protect 18,000 kilometers of rivers, bolster climate resilience, and support human well-being.

of willing donors to announce dedicated financial support for the Amazon as part of their contribution to this target, while also encouraging philanthropic organizations and private sector actors to participate.

Mobilize countries, private sector stakeholders, financial institutions (including Public Development Banks such as MDBs), and major philanthropic organizations to **fund the** transition toward nature-positive economies that ensure conservation, sustainable use, and restoration of ecosystems in the Amazon, and globally.

SPECIFICALLY, WE CALL FOR:

Driving action from the whole of society in support of avoiding the Amazon tipping point, which includes:

- 1. A global declaration of action for the Amazon aimed at increasing financial flows and avoid the tipping point as part of the \$ 1.3T target, which includes:
 - A clear action plan to align financial flows with nature-positive economies in the Amazon, scaling down and/or reinvesting finance flows, including repurposing subsidies and perverse incentives that are destroying the Amazon, and demanding traceability among key supply chains developed near areas of high deforestation.
 - A global declaration to combat transnational illegal economies (e.g. land speculation and illegal land markets, illegal logging, wildlife trade, and mining) through coordinated law enforcement and satellite monitoring.
 - Call to MDBs, bilateral DFIs, and regional PDBs to prioritize aligning financial products
 with nature conservation goals, standardizing key performance indicators, and building
 government capacity through technical, legal, and project management expertise,
 recognizing the value of nature assets in sovereign credit ratings and debt sustainability
 analysis.
 - Action statement to promote environmental payment services to protect the water cycle, flying rivers and biodiversity in the Amazon, and promoting spaces for dialogue and strengthening of traditional knowledge.
- 2. Champion the Tropical Forest Forever Facility (TFFF) and mobilize the public, philanthropic and private finance sectors to substantially increase financial support and investments to tropical forests, including the Amazon in implementing integrated strategies:
 - Publicly endorse the TFFF as a cornerstone of COP30 outcomes, advocating for its formal launch with a \$125 billion global target.
 - Emphasize the involvement of tropical forest countries, IPLCs, and civil society in designing the facility, highlighting transparency and inclusivity as key priorities.
 - Mobilize direct funding for IPLCs recognizing their own governance structures, recognizing their contributions protecting nature, tackling climate change and promoting adaptation measures in their territories.
- 3. Make this Call to action a key part of the High Level Climate Champions' Action Agenda to activate and mobilize non-state actors.

The organizations listed here are available to support the Presidency and the office of the High-Level Climate Champions in these requests. With expertise in key areas related to conservation, climate finance, and sustainable development, these institutions can significantly contribute to implementing strategies that promote the protection of the Amazon biome, strengthen local economies, and align climate actions with global sustainability goals.















