

PRIVATE SECTOR ROADMAP FOR A SUSTAINABLE AMAZONIA



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Preamble

This White Paper is the product of a collective effort to define the role of the private sector in shaping a prosperous future for Amazonia, one that combines sustainability, productivity, and innovation, moving beyond a narrative centered solely on conservation. It was conceived within the framework of Amazonia Forever, a regional initiative led by the Inter-American Development Bank (IDB) Group with the support of the finance ministers of the eight Amazonian countries.

The document results from the work of the Amazonia Forever Private Sector Task Force, established under the Americas Business Dialogue. Unlike many traditional approaches that view the region from the outside, this Task Force brings a perspective rooted in the realities, opportunities, and challenges of those who operate in Amazonia on a daily basis. It brings together business leaders from across the region, chaired by Denis Minev, CEO of Grupo Bemol (Brazil). Its members include: Valmir Ortega, CEO of Belterra (Brazil); Michelle Arevalo-Carpenter, Executive Director at SOCAP Global/Impaqto Capital (Ecuador); Rafael Torrijos, President of Ganaderos de Caquetá (Colombia); Ana Karoliny Calleri, Founder of Café Imeru (Brazil); Yana Dumaesq, Regional Director of Public Policy for Latin America at Meta (Brazil); Patricia Bacchus, CEO of Caribbean Containers (Guyana); Pablo Concha, Agribusiness Director

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Over a six-month period, the Task Force held four virtual meetings. These sessions provided space to collect members' insights on key issues: (i) the private sector as a driver of nature-based solutions for restoring degraded land and valuing standing forests; (ii) the transition of conventional economies to sustainable models; (iii) achieving a balance between urban and rural development; and (iv) advancing technology and innovation in the Amazon. This structured approach ensured that perspectives from different sectors and countries were incorporated into the final document.

This White Paper reflects these contributions. It presents a vision for an Amazonia that generates well-being and economic opportunity for its people while preserving its natural assets, grounded in the knowledge and commitment of those who live and invest in the region. It outlines a vision for the private sector's engagement in the Amazon, along with concrete recommendations for policy and investment, to be presented to regional and global decision-makers.



Executive Summary

The Pan-Amazonia region (encompassing parts of Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana, and Suriname) is nearing a critical tipping point that could trigger irreversible ecosystem collapse. At the same time, global demand for nature-based solutions (NbS) and bio-based products has never been higher, giving private sector leaders an unprecedented opportunity to address forest loss while opening new markets and driving technological innovation. This White Paper argues that the future of Amazonia must go beyond a defensive conservation paradigm and instead embrace a development vision that combines prosperity, sustainability, and technology, one built from within the region, by those who know it and shape its economy daily.

This whitepaper sets out a practical agenda for entrepreneurs and investors based on the two tracks below:

1. Leapfrogging Opportunities

This approach involves the adoption of modern, sustainable systems that bypass outdated and destructive stages of industrial development. Rather than replicating the historical trajectories of other regions, Amazonia can leapfrog toward a new economic model that values its natural assets while generating opportunity for its people. By leveraging advanced technologies, the region can build a resilient economy that drives progress without the environmental and social costs of legacy infrastructure.

De-risk and scale nature-based solutions

As one of the most promising nature-based solutions (NbS) for both carbon storage and biodiversity conservation, restoration should be prioritized as a cornerstone of climate and nature strategies. However, as with many types of NbS, restoration often lacks the scale and financial viability required for widespread adoption. To address this, private sector actors should invest in relevant supply chains, including seed networks and nurseries. They should also launch geographically diverse demonstration projects to validate replicable business models and deploy technical support teams to accelerate adoption.

Transform legacy industries

Halting the primary drivers of deforestation requires implementing responsible, mercury-free mining practices. It also requires supporting small-scale miners in their transition to formal, sustainable markets. In terms of agriculture and livestock, the objective should be to expand regenerative practices that increase productivity on existing land and reduce the pressure to clear new forests.

Reposition Amazonian cities

Urban centers must shift from being drivers of deforestation to becoming industrial and service hubs for a standing-forest bioeconomy. This includes investment in green infrastructure and the implementation of solutions like reflective roofing, tree planting, and improved sanitation systems.

Close the bioeconomy finance gap

Innovative bioeconomy ventures face a significant financing gap, as their risk profiles and long-term return horizons do not align with conventional capital markets. A full spectrum of capital is therefore needed, starting with early-stage and patient capital to de-risk pioneering projects. Next, blended finance structures should be designed to mobilize large-scale investment for long-cycle projects. The ultimate goal is to integrate natural capital into business models through instruments like carbon and biodiversity credits that make environmental benefits a visible part of corporate balance sheets.





2. *Game-Changers*

“Game-changers” are ambitious, systems-level initiatives that require coordinated public-private action. They target fundamental bottlenecks in the regional economy to create transformative, not incremental, change. They reflect Amazonia’s capacity to lead complex innovation, rather than being seen merely as a recipient of external solutions. Their successful execution is essential to shift the region’s economic trajectory on a scale that meets the ecological challenge.

To achieve large-scale impact, a combination of private and public actors can advance bold initiatives such as:



Reoriented industrial zones

Industrial centers like Brazil’s Manaus Free Trade Zone (ZFM) still rely heavily on fossil-based materials, leading to high environmental impacts and underuse of local ecological resources. The private sector has a strategic opportunity to shift toward a low-carbon, bio-based economy by substituting fossil inputs with materials from Amazonia biodiversity (e.g., biodegradable plastics, natural fibers, and bio-resins).

Amazônia.ai knowledge engine

Valuable data on Amazonia biodiversity, markets, and traditional knowledge is fragmented and hard to access, hindering informed decision-making for new ventures. A unified intelligence platform powered by AI would make this knowledge actionable for entrepreneurs and investors in green enterprises.

Autonomous forest restoration network

Manual restoration methods are too slow, costly, and labor-intensive to meet the scale of Amazonia’s restoration challenge. Verifying progress across vast and remote territories is also a significant operational barrier. An interconnected system using drones, AI, and sensors would accelerate and validate large-scale initiatives.

Amazonia mobility grid

Remote producers face isolation and limited market access due to reliance on fossil-fueled river transport. A clean, electrified river network featuring solar-powered cargo boats, autonomous taxis, electric drones, and floating logistics hubs could facilitate travel across the Amazonia regions of countries like Brazil, Colombia, Peru and Bolivia. Supported by floating solar stations and modular battery storage, this system would expand economic opportunities, improve health and education connectivity, and reduce transport emissions in remote areas.

Ultimately, the private sector as a whole faces a stark choice: continue extractive practices that will destroy the resource base upon which future prosperity depends, or lead a transformation toward a regenerative Amazonian economy envisioned by those who live, build, and invest in the region. Entrepreneurs and investors who act decisively today will capture first-mover advantages in bioeconomy markets worth hundreds of billions annually. Those who delay risk ending up with stranded assets as regulatory frameworks tighten and consumer preferences shift.

The transformation of the Pan-Amazonia economy cannot wait. The region's ecological integrity, the lives and livelihoods of nearly 50 million inhabitants, and the stability of the global climate system demand immediate action at scale. What is at stake is not only conservation, but the opportunity to define a new development model, one rooted in innovation, inclusion, and long-term resilience for Amazonia and its people.

Introduction

Amazonia is one of the planet's most vital ecosystems. Spanning 8 million km², it hosts more than 10% of the world's terrestrial biodiversity¹ and stores 250-300 billion tons of carbon – equivalent to 15-20 years of global greenhouse gas emissions.² However, with 17-18% of the primary forest already lost to deforestation, Amazonia faces serious threats to its capacity to sustain life and regulate regional and global climate patterns.³

Approximately 38% of the remaining forest is suffering from degradation due to fire, edge effects, timber extraction, and extreme drought, releasing carbon emissions that rival those from deforestation.⁴ Climate change compounds these challenges: by 2050, nearly half of the forested area of Amazonia could face simultaneous stresses from higher temperatures, extreme droughts, deforestation, and fires⁵ that push the biome dangerously close to a tipping point of 20-25% forest loss after which it transforms into a dry, savannah-like landscape.⁶

¹Guayasamin, J. M., et al. (2021). Chapter 2: Evolution of Amazonian biodiversity. In C. Nobre, et al. (Eds.), *Amazon Assessment Report 2021* (1st ed.). UN Sustainable Development Solutions Network (SDSN). <https://doi.org/10.55161/CZWN4679>.

²Saatchi, S. S., et al. (2011). Benchmark map of forest carbon stocks in tropical regions across three continents. *Proceedings of the National Academy of Sciences*, 108(24), 9899–9904. <https://doi.org/10.1073/pnas.1019576108>.

³Berenguer, E., et al. (2021). Chapter 19: Drivers and ecological impacts of deforestation and forest degradation. In C. Nobre, et al. (Eds.), *Amazon Assessment Report 2021* (1st ed.). UN Sustainable Development Solutions Network (SDSN). <https://doi.org/10.55161/AIZJ1133>.

⁴Lapola, D. M., et al. (2023). The drivers and impacts of Amazon forest degradation. *Science*, 379(6630), eabp8622. <https://doi.org/10.1126/science.abp8622>.



The Pan-Amazonia region is also home to 47.6 million people whose lives and livelihoods are at risk in the face of these potential transformations.⁷ In the Brazilian Legal Amazon alone, the population grew from 7.1 million in 1970 to 26.7 million in 2022 (13% of the national population). This growth is largely driven by urbanization, which rose from 45% of residents in 1980 to over 70% by the early 2000s. Meanwhile, many rural areas have stagnated or declined as people migrate to cities. These demographic changes carry significant implications for infrastructure and public service provision, security and violence, and the region's overall socioeconomic vitality.

This multidimensional crisis is urgent, but so are the opportunities, especially since Amazonia represents a foundation of food supply chains, water systems, public health, energy access and trade routes. As the region confronts economic, social and environmental volatility, sustainable use of its natural assets can form the basis of a more productive and resilient economy.

⁵Flores, B. M., et al. (2024). *Critical transitions in the Amazon forest system*. *Nature*, 626(7999), 555–564. <https://doi.org/10.1038/s41586-023-06970-0>.

⁶Lovejoy, T. E., & Nobre, C. (2018). *Amazon Tipping Point*. *Science Advances*, 4(2), eaat2340. <https://doi.org/10.1126/sciadv.aat2340>.

⁷Santos, D., et al. (2025). *Fatos da Amazônia 2025. Amazônia 2030*. <https://imazon.org.br/wp-content/uploads/2025/05/FatosAMZ2025.pdf>



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Leapfrogging Development

To deliver sustainable development in Amazonia, private sector investment must align with environmental goals, community priorities, and scalable innovation. This roadmap offers practical, time-bound steps organized by sector.

A. Nature-based solutions

Invest in restoration supply chains

Strengthen foundational capacity for large-scale restoration by expanding native seed networks, building regional nurseries, and training labor for replanting efforts. Address chronic bottlenecks in the early stages of restoration.

Urgency	High	Seed, nursery, and labor shortages already limit projects
Execution Complexity	High	Significant logistical coordination and physical infrastructure across regions
Expected Impact	High	Removes a systemic bottleneck for large-scale restoration

Expand NbS demonstration projects

Launch a geographically-diverse portfolio of pilot projects, tailored to local ecological and social conditions to validate representative and replicable technical and economic models.

Urgency	High	Proof-of-concept for a wide range of conditions, required for investor confidence and adoption
Execution Complexity	Medium	Site selection, local partners, and moderate capital
Expected Impact	Medium	Demonstrates relevance of proven models that can be replicated and adapted across Amazonia's diverse contexts

Deploy technical support teams

Create and empower networks of trained local technicians in remote Amazonia regions, working in coordination with local governments and non-state actors. Equip teams with AI-enhanced digital tools for efficiency and accuracy, while leveraging new technologies to minimize the need for on-site deployments.

Urgency	High	On-the-ground technical capacity is a prerequisite for successful projects
Execution Complexity	Medium	Training and logistical support for personnel in remote areas
Expected Impact	Medium	Directly improves the success rate and quality of individual projects and initiatives

Develop regional NbS catalogue

Create and publish a catalogue of NbS that are replicable and accessible, especially for rural smallholders in the region. Include case studies, investment profiles, and best practices to aid replication.

Urgency	High	Immediate guidance will accelerate investor and producer adoption
Execution Complexity	Low	Primarily desk research and expert consultation, rather than physical implementation
Expected Impact	Low	Supplies direction but impact relies on subsequent uptake

Advance biotech and bioeconomy R&D

Invest in R&D of biodiversity-based products and sustainable biomass solutions (e.g. fungi, insects, plant compounds, biochar, and rock dust) to unlock high-yield systems that deliver commercial value, promote ecological regeneration, and meet demands for food, fiber and other materials.

Urgency	Medium	Long-term initiative that builds future value chains beyond immediate, proven solutions
Execution Complexity	High	Specialized scientific expertise, laboratories, and long development cycles
Expected Impact	High	Can create new, high-value industries from Amazonia's unique biological assets

Develop vocational training linked to local demand

Through existing institutions, fund vocational and technical education (including AI and automation-skills development) aligned with the expected labor market demand in sustainable industries.

Urgency	Medium	Aligns the workforce with the needs of an emerging green economy as it begins to scale
Execution Complexity	Medium	Curricula reform and close coordination between educational institutions and employers
Expected Impact	High	Produces a skilled labor force, a key component for long-term, self-sustaining economic development

Increase market access for Amazonian bioeconomy producers

Build physical and digital platforms that connect small and mid-scale producers directly with buyers. Improve traceability, pricing, and certification to compete in ethical green markets. This could also include improvements across the entire supply chain, including processing, biofactories and cold chain distribution.

Urgency	Medium	Higher incomes ease forest-clearing pressures by lowering the appeal of illegal activities, as profitable legal options reduce the incentive for crime
Execution Complexity	Medium	Requires technological development and logistics, but can be built incrementally
Expected Impact	Medium	Raises producer earnings and supports sustainable products

Expand regional innovation hubs

Establish a network of innovation hubs, in partnership with research institutions, to build a critical mass of local entrepreneurs. These hubs will focus on Amazonia-specific challenges and provide entrepreneurs with access to scientific expertise, mentorship, and seed capital, turning local knowledge into viable businesses.

Urgency	Medium	Builds a long-term, self-sustaining innovation ecosystem that is crucial for a durable economic transition
Execution Complexity	Medium	Sustained funding and collaboration between academia and private sector
Expected Impact	Medium	Generates localized solutions and cultivates a new generation of entrepreneurs

Expand agroforestry and NbS implementation

Employ a learning-by-doing approach to implement large-scale NbS and agroforestry across millions of hectares. Support the transition with robust planning tools and policies that facilitate knowledge sharing and human capital development.

Urgency	Low	Scaling follows validated pilots and supply chain readiness
Execution Complexity	High	Millions of hectares, many stakeholders, and constant monitoring
Expected Impact	High	Achieves landscape-level ecological restoration and economic transformation

B. Legacy industries

Implement responsible mining practices

Implement technical assistance and innovation programs to promote mercury-free gold processing and traceability, enabling eco-friendly extraction and access to responsible markets. Expand efforts to legalize and reform small-scale mining and slash-and-burn farming, integrating them into formal markets with sustainable, verifiable practices.

Urgency	High	Addresses severe environmental and health damage from illegal mining
Execution Complexity	High	Involves changing entrenched practices, technology transfer, and navigating powerful illicit interests
Expected Impact	Medium	Mitigates a primary driver of deforestation and mercury pollution in Amazonia

Transform established agriculture and livestock practices

For livestock, adopt rotational grazing and silvopastoral systems to restore degraded land and boost cattle productivity, easing pressure to clear new forest. In agriculture, scale regenerative techniques like agroforestry and no-till farming to improve soil health, conserve water, diversify income and build resilient food systems.

Urgency	Medium	Long-term transformation that builds on NbS integration and responsible sourcing models
Execution Complexity	High	Requires technical training, input supply, and market incentives, in addition to navigating political complexities due to competing interests, skepticism, and potential lobbying
Expected Impact	High	Slows the advance of the agricultural frontier while increasing productivity

Promote clean energy and soil fertility by leveraging biomass

Commercialize nature-compatible bioenergy systems using local biomass for biogas, charcoal alternatives, and closed-loop soil productivity solutions.

Urgency	Low	Provides a valuable alternative to fossil fuels, but depends on mature, sustainable agriculture
Execution Complexity	Medium	Requires reliable biomass supply chains and technology adapted to local conditions
Expected Impact	Medium	Contributes to energy independence and a circular economy, reducing pressure on forests for fuel

C. Amazonian cities

Develop urban models for a bio-based economy

Shift from commodity-based growth to standing-forest urban economies by developing integrated industrial and service hubs that: process non-timber forest products; drive innovation and research around solutions that leverage Amazonian biodiversity; serve as logistics and certification centers for sustainable supply chains; and host specialized legal, financial, and technical services. Comparable initiatives across the region—such as Belém’s Amazon Bioeconomy & Innovation Park in Brazil, the CBA⁸ in Manaus, Colombia’s SINCHI⁹ Institute, and Peru’s CINCIA¹⁰—illustrate how urban hubs can process NTFPs¹¹, foster R&D, and provide certification and technical services that make bioeconomy supply chains more investable and resilient.

Urgency	Medium	Strategic long-term reorientation will be crucial for bioeconomy growth and deforestation pressure reduction
Execution Complexity	High	Coordinated efforts across industrial policy, urban planning, private investment, and infrastructure development
Expected Impact	High	Establishes connection between urban prosperity and forest conservation

⁸Centro de Bionegócios da Amazônia

⁹Instituto Amazónico de Investigaciones Científicas - SINCHI

¹⁰Centro de Innovación Científica Amazónica

¹¹Non-Timber Forest Products

Pilot and scale urban greening and infrastructure reforms

Integrate green design and infrastructure into urban planning across municipalities of varying sizes. Promote policies to expand green spaces, promote climate-adaptive construction materials (e.g. cool roofs), and optimize circular urban water and sanitation systems. Experiences such as Belém’s waterfront greening, Manaus’s climate-resilient housing pilots, and Leticia’s urban habitat restoration efforts show how Amazonian cities can reduce flood risks, lower energy use, and enhance public health while creating investable opportunities for sustainable infrastructure.

Urgency	Low	Early pilots guide investment to address growing urban pressures
Execution Complexity	Medium	Pilots can be implemented at the building or neighborhood level with known technologies, but scaling will require budget shifts and updated building codes
Expected Impact	Medium	Boosts climate resilience for city residents while providing benefits like temperature regulation, cleaner air, improved mental health, fewer heat-related illnesses, better quality of life, higher property values, and lower energy bills



D. Finance & investment

Engage early-stage and patient capital

Convene investors and venture philanthropists willing to support ventures with long-term value creation in environmental regeneration and inclusive development. Prioritize those open to lower short-term ROI but interested in broad impact.

Urgency	High	Early money de-risks pilots and supply chains
Execution Complexity	Medium	Requires targeted outreach and building a coalition of aligned investors, not creating new financial instruments
Expected Impact	Medium	Catalytic funding attracts mainstream investors

Bridge capital to project needs and specificities

Design blended finance structures and public-private investment vehicles suited for long-growing-cycle projects such as forest restoration and agroforestry. Use concessional capital and guarantees to reduce risk and expand access to flexible credit.

Urgency	Medium	Necessary for scaling, once demonstration projects have proven their viability
Execution Complexity	High	Involves complex financial engineering and coordination between public, private, and philanthropic sectors
Expected Impact	High	Mobilizes the large-scale capital necessary to transition regional economies

Create Amazonian Chamber of Commerce for Innovation

Establish a transnational Chamber of Commerce that unites entrepreneurs, investors, accelerators and service providers to catalyze green, inclusive business models across Amazonia. This platform will drive collaboration across borders, scale urban-rural innovation, and position the region as a global engine of sustainable economic transformation.

Urgency	Medium	Important for scaling solutions but not a prerequisite for immediate action to address bottlenecks
Execution Complexity	High	Establishing legitimacy demands substantial political and diplomatic effort
Expected Impact	High	Addresses fragmentation by creating a unified market, fostering collaboration, and providing a central voice for advocacy

Mainstream natural capital in business models and public budgets

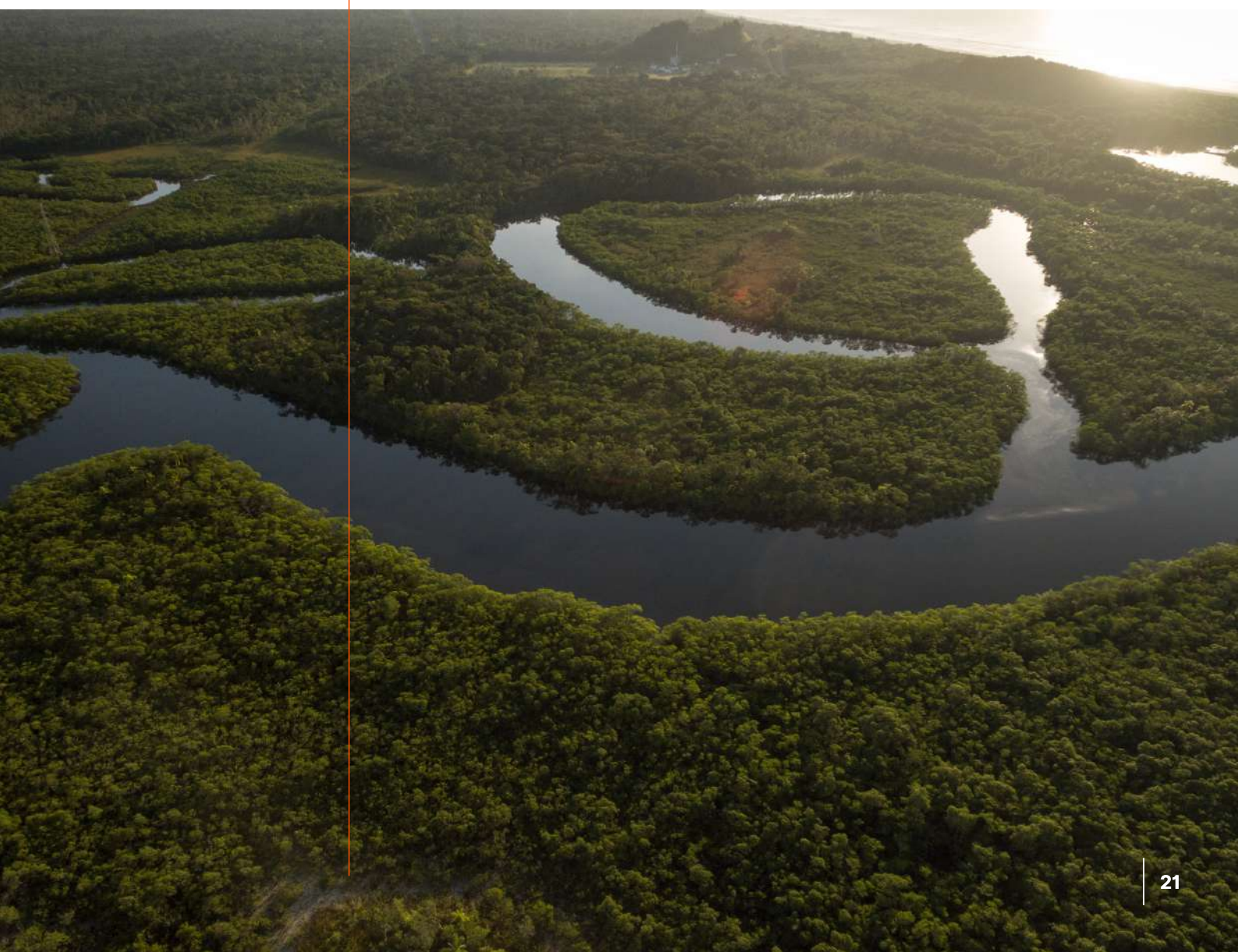
Introduce tools and frameworks to integrate ecosystem value into corporate decisions and investments. Expand instruments like carbon credits, biodiversity credits, and ecosystem service payments. Promote transparency standards that address deforestation risks and environmental dependencies, bringing companies into alignment with standards like the Taskforce on Nature-related Financial Disclosures (TNFD).

Urgency	Medium	Mainstreaming follows the creation of a critical mass of projects and market demand
Execution Complexity	Medium	Depends on market maturity and corporate readiness to adopt new accounting methods
Expected Impact	High	Makes environmental value and risk visible on balance sheets, fundamentally changing corporate behavior

Roll out AI-enabled microfinance

Support microfinance institutions in integrating AI-powered credit scoring and financial literacy tools to reduce risk and support borrowers in remote areas.

Urgency	Medium	Technological enhancement of the existing system that depends on successful digital access and literacy
Execution Complexity	Medium	Requires technology integration and user training
Expected Impact	Medium	Increases financial inclusion and reduces delinquency risk for individuals and small businesses



Game-Changers

To shift the trajectory of development in Pan-Amazonia, private sector actors must make bold, coordinated investments that combine technology, finance, and regional knowledge. A model for this is already proving effective through catalytic initiatives that mobilize diverse partners around specific goals. Examples include: 1) global competitions like XPRIZE Rainforest¹² and the Earthshot Prize;¹³ 2) targeted problem-solving through efforts like the Artisanal Mining Grand Challenge;¹⁴ and 3) R&D accelerators like the Instituto Clima e Sociedade's AI for Nature & Climate Challenge.¹⁵

The proposals below build on this momentum. Each is designed to overcome a structural bottleneck and achieve large-scale impact, and can be undertaken by consortia of businesses, investors, research institutions, and community partners across the region.

Amazônia.ai

Build on efforts to use AI to monitor forest cover and preserve indigenous languages by creating a unified intelligence platform that connects Amazonia's vast, fragmented knowledge base, encompassing scientific research, satellite data, indigenous ecological wisdom, and market intelligence. This engine will use advanced language models to ingest, structure, and translate data from thousands of sources, making it queryable and actionable for the first time. It will serve as a decision-support system for entrepreneurs, investors, and policymakers, capable of answering complex questions. By establishing protocols for data sovereignty and equitable benefit-sharing with indigenous communities, this platform will transform the region's intellectual capital into a driver of the bioeconomy, positioning Amazonia not just as a source of materials, but as a global source of high-value, actionable intelligence.



¹²XPRIZE Foundation. (2025). Overview | XPRIZE Rainforest. <https://www.xprize.org/prizes/rainforest>

¹³The Earthshot Prize. (2025). Our Vision & Mission. <https://earthshotprize.org/our-vision-mission/>

¹⁴Conservation X Labs. (2023). The Artisanal Mining Grand Challenge: The Amazon. <https://www.artisanalminingchallenge.com/>

¹⁵Instituto Clima e Sociedade. (2025a). Desafio IA Natureza & Clima. <https://climaesociedade.org/edital/edital-tech/>

Industrial zones into engines for the bioeconomy



Industrial centers across the region function as important economic drivers, yet their operational models often conflict with their sensitive ecological surroundings. Brazil's Manaus Free Trade Zone (ZFM) is a primary example. It hosts over 500 firms and employs more than 100,000 people, but its production chains still rely heavily on imported, fossil-based inputs. These materials, including synthetic polymers, petrochemical-derived packaging, and fuels, create a substantial carbon footprint and neglect the region's vast biological assets.

These industrial zones offer a unique opportunity to lead a transition toward a low-carbon, innovation-driven bioeconomy. By introducing mechanisms to replace high-carbon inputs with bio-based alternatives derived from Amazonian biodiversity (e.g. biodegradable bioplastics, natural fibers, bio-based resins, or essential oils), selected firms could become demonstration cases for scalable substitution. This transformation could start with the strategic identification of target inputs for replacement, followed by investment in R&D, prototyping, and pilot production of Amazonia-based substitutes. Demonstrations within real production environments at these zones would validate performance and promote adoption, while scale-up support would help new bio-based inputs achieve competitive costs and volumes. Similar models have succeeded in Europe to decarbonize material systems, and these zones could lead a comparable effort in Latin America, anchoring its industrial future in the value of the forest, not its destruction.





Pan-Amazonia investment platform or fund

Capitalize on the momentum from new instruments like the Amazonia Bonds¹⁶ to develop a platform with a broad mandate to finance the bioeconomy, regenerative agriculture, and sustainable infrastructure while strengthening local financial institutions. The fund could combine a project-preparation facility with equity for direct investments in early-stage projects. It could also allow private investors to participate with debt and prioritize local-currency instruments to ensure bankability. The platform could be structured in one of two ways: 1) a Pan-Amazonia fund to address transboundary issues and enable stronger cross-border integration, or 2) a network of national funds with a shared mandate that facilitates local-currency structuring.

Autonomous forest restoration network

Build an interconnected system that uses drone fleets, AI and local expertise to accelerate active forest regeneration across degraded landscapes. Drones equipped with automated seed-dispersion technology will deliver native species tailored to microclimatic conditions.¹⁷ IoT sensors on the ground will feed real-time data into a digital twin model to monitor factors such as soil health and vegetation growth. A blockchain layer could verify progress and trigger automated issuance of biodiversity and carbon credits as ecological thresholds are met. Training programs for drone operators, field technicians, and data managers will create thousands of high-quality jobs in underserved areas, converting forest restoration into a digitally-enabled service economy.

¹⁶IDB. (2025, July 1). IDB and World Bank Launch New Amazonia Bond Issuance Program. <https://www.iadb.org/en/news/idb-and-world-bank-launch-new-amazonia-bond-issuance-program>

¹⁷Similar efforts are already underway by companies such as Morfo (Brazil), Flash Forest (Canada), Marut DroneTech (India), and AirSeed (Australia).

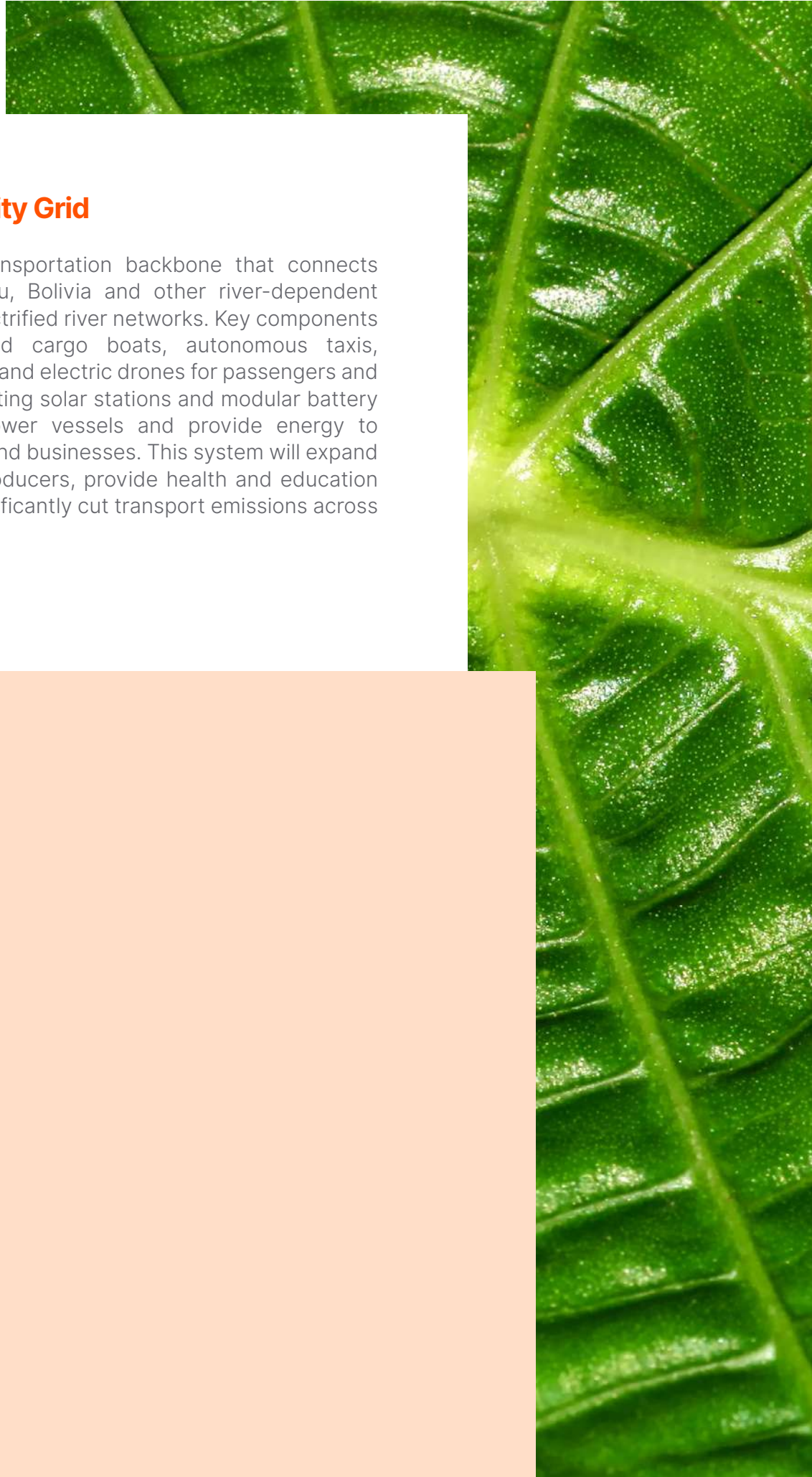
NatureTech Innovation Labs

Create a network of incubators across the region designed to bring biodiversity-driven R&D to market faster. Each lab will focus on converting Amazonian biological assets into solutions for food, health and sustainable materials. These facilities will help researchers and startups prototype and scale innovations such as insect-based protein systems, plant-derived pharmaceuticals and biodegradable products. Locating a significant number of labs outside national capitals would decentralize talent retention, broaden the reach of innovation and ensure that value creation remains inside Amazonia, benefiting more communities across the region. This would also make it easier to integrate local knowledge, given the greater proximity to indigenous and other traditional communities.

Amazonian Community Green Banks

Develop digital-first financial institutions focused on funding NbS. These banks will offer mobile-based services including microloans, savings products and payment tools tailored to local economic conditions. Capital will be directed to activities such as agroforestry, solar energy, reforestation and urban green infrastructure. AI-driven credit scoring and mobile wallet infrastructure will allow these banks to serve producers at scale while reducing administrative barriers and transaction costs.





Amazonia Mobility Grid

Establish a clean transportation backbone that connects Brazil, Colombia, Peru, Bolivia and other river-dependent countries through electrified river networks. Key components include solar-powered cargo boats, autonomous taxis, floating logistics hubs and electric drones for passengers and freight transport. Floating solar stations and modular battery storage units will power vessels and provide energy to nearby communities and businesses. This system will expand market access for producers, provide health and education connectivity, and significantly cut transport emissions across remote regions.

Concluding Reflections

Amazonia is critical to planetary stability, and its future hinges on the choices made in the next decade. Private sector entrepreneurs and investors have a central role to play in reversing deforestation trends, expanding NbS, and building a diversified, low-emission economy rooted in local talent, biological innovation, and sustainable production systems. The recommendations in this roadmap reflect the perspective of those who build, invest, and operate in the region, charting a path forward grounded in Amazonian realities and driven by its potential.

This roadmap outlines a path: demonstrate viability through early pilots, expand financing structures that reward regeneration, build regional innovation infrastructure, and pursue transformative initiatives that scale solutions across borders. High-impact opportunities exist in agroforestry, clean transport, biomaterials, restoration services, and inclusive finance, areas that can simultaneously conserve forests and expand prosperity in Amazonia.

What comes next requires bold participation from business and finance leaders across the region: aligning investment with ecological recovery, backing science-based enterprises, and building inclusive supply chains that benefit both people and nature.



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