South America Fire Fund

Operational Overview

Renaissance Philanthropy

MARCH 2026

Prevfogo operation in the municipality of Guajará-Mirim, in Rondônia, carried out in August 2024. Photo: Mayangdi Inzaulgarat/Ibama

Operational Overview

Executive Summary

The South America Fire Fund is founded on the conviction that destructive fire—the primary cause of deforestation in South America—is solvable. With an anchor investment of $30 million, matched with an additional $70 million to be raised by Renaissance Philanthropy, the proposed two to three-year Test Fund will validate an integrated set of strategic levers—*Fire Prevention & Resilient Stewardship, Enhanced Detection & Coordinated Rapid Response, and Integrated Fire Information & Decision Systems*—that when activated together will shift the system creating today's destructive fires.

This Test Fund will create the critical evidence base for a subsequent medium-term, scaled initiative that attracts public and private financing and a global community of practice to end destructive fire. In the face of a predicted year of strong El Niño phenomenon, the moment is now to act to preserve the incredible biodiversity of South America and avoid cascading tipping points into other climate systems.

This proposal outlines the Operational Plan for the South America Fire Fund, including detailing the seven topline indicators, baselines, and targets that will demonstrate whether the Fund's investment thesis is working, the first six target geographies where the package of interventions will be deployed, and the detailed plan for the specific activities, partners, and associated budgets for the package of interventions.

Across each of the three Core Strategies, we have considered and proposed innovative approaches, technologies, and activities that shift behaviors and incentives, as well as structures for cross-border and cross-agency collaboration. These are further detailed in attached technical annexes. The Operational Plan has been developed in collaboration with leading global and regional experts, through individual consultations, convenings, a Big Think, and workshops, alongside a detailed review of existing evidence and projects.

Questions of sustainability have been a cross-cutting consideration—at the $100 million Test Fund level, the Fund is expected to leverage up to $200 million in public funds through jurisdictional REDD, up to $50 million through outcome base financing co-payers, and $70 million from insurance markets.

Photo: Mayangdi Inzaulgarat/Ibama

In the Amazon, destructive fire has transformed from a proximate cause closely linked to deforestation drivers such as agriculture, mining, and infrastructure to **the primary driver of deforestation.** These fires increasingly threaten both biodiversity and human communities, as they escape and burn enormous areas.

In the last five years, this shift has become increasingly clear in the drought-ravaged Amazon, Pantanal, and Chiquitania regions. In 2024, 44.5 million acres, an area the size of California, burned in the Brazilian Amazon alone. An astonishing ~40% percent of these fires burned in primary tropical forests[1]. For the first time ever recorded, smoke from Amazon fires actually overtopped the Andes mountain range[2].

Changing climate and land use trends clearly show that without concerted intervention, fires will continue to escape, transform into megafires, destroy biodiversity, and reshape ecosystems. These dynamics **threaten decades of investments in the region**, and more seriously threaten the integrity of the Amazon as a rainforest, and its adjacent, dependent ecosystems of the Pantanal and Chiquitania. Fire is creating a potential cascade of tipping points that can lead to global climate instability and enormous biodiversity loss.

Yet, **fire is a solvable problem**. Destructive fire impacts people across socio-cultural, economic, and political spectra, providing the opportunity for powerful, transformative collaboration. In the 2024 Brazilian Amazon, 10% of the fires caused 60% of the burned area[3]. By understanding and leveraging key conditions and actors that lead to destructive fire, we can successfully prevent and manage these fires. Target geographies have committed and capable orchestrator partners, but they lack the information, technologies, and collaboration structures to succeed. Financial instruments are only beginning to incorporate wildfire and often don't integrate with community efforts. New technology can enable better prediction, detection, and rapid response to fire.

The South America Fire Fund brings together these diverse elements in a powerful, coherent investment strategy. We have gathered the world's leading experts, scientists, innovators, and fire practitioners from across South America and globally to operationalize the Fund. It has the capacity to test actions—and work in contexts—that are critical to success but that extend well beyond the mandates of existing initiatives.

1. World Resources Institute (WRI). 2025. Global Forest Review: Deforestation trends and analysis. Global Forest Watch.
2. Doug Morton, NASA
3. Doug Morton, NASA

From the five regions originally treated in the South America Fire Fund Strategy, we have determined that we can increase the Fund's impact by **focusing on the Amazon bioregion, the Chiquitania (specifically the Chiquitano Dry Forest ecoregion), and the Pantanal ecoregion** (Figure 1). These regions feature high biodiversity and conservation value, rapidly changing fire regimes, strong partner ecosystems, and opportunities for innovation and learning.

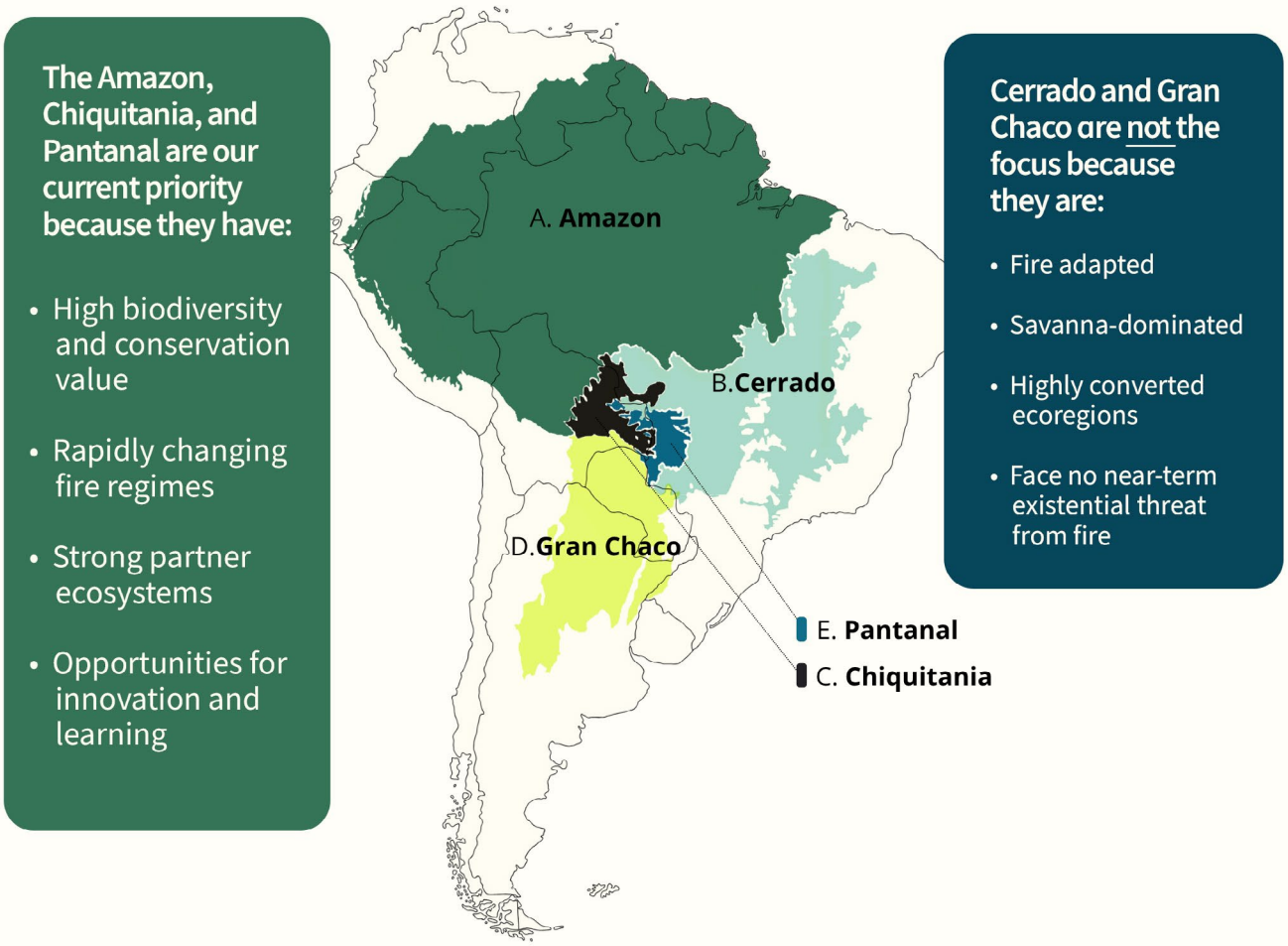


Figure 1: Selected Ecoregions and Justification. *The Amazon, Chiquitania and Pantanal regions are all dominated by fire-sensitive ecosystems that may not survive in their present form if fire is not addressed in the near term.*

Critically, although some fire-adapted dynamics are found in transition zones, these regions are dominated by fire sensitive ecosystems. Over the past 5-10 years, rapidly changing fire dynamics have dramatically affected each of these regions to the point that, if not specifically addressed, **fire threatens their intrinsic viability within the next decade.** Conversely, the Cerrado and Gran Chaco were deprioritized from this Test Fund because both are fire adapted, savanna-dominated, and highly converted ecoregions. Although they suffer from increasingly destructive fire regimes and the changing climates, these ecoregions do not face the same existential near-term threat from current fire dynamics, and combining them into our experimental design would add substantial variance.

Within the Amazon, Chiquitania, and Pantanal, we have selected and assessed six target geographies — called **Landscape Interventions for Fire Transformation** (**LIFTs)** — for Day One implementation, shown in Figure 2 below, as well as eight additional geographies for potential expansion with leveraged funds.

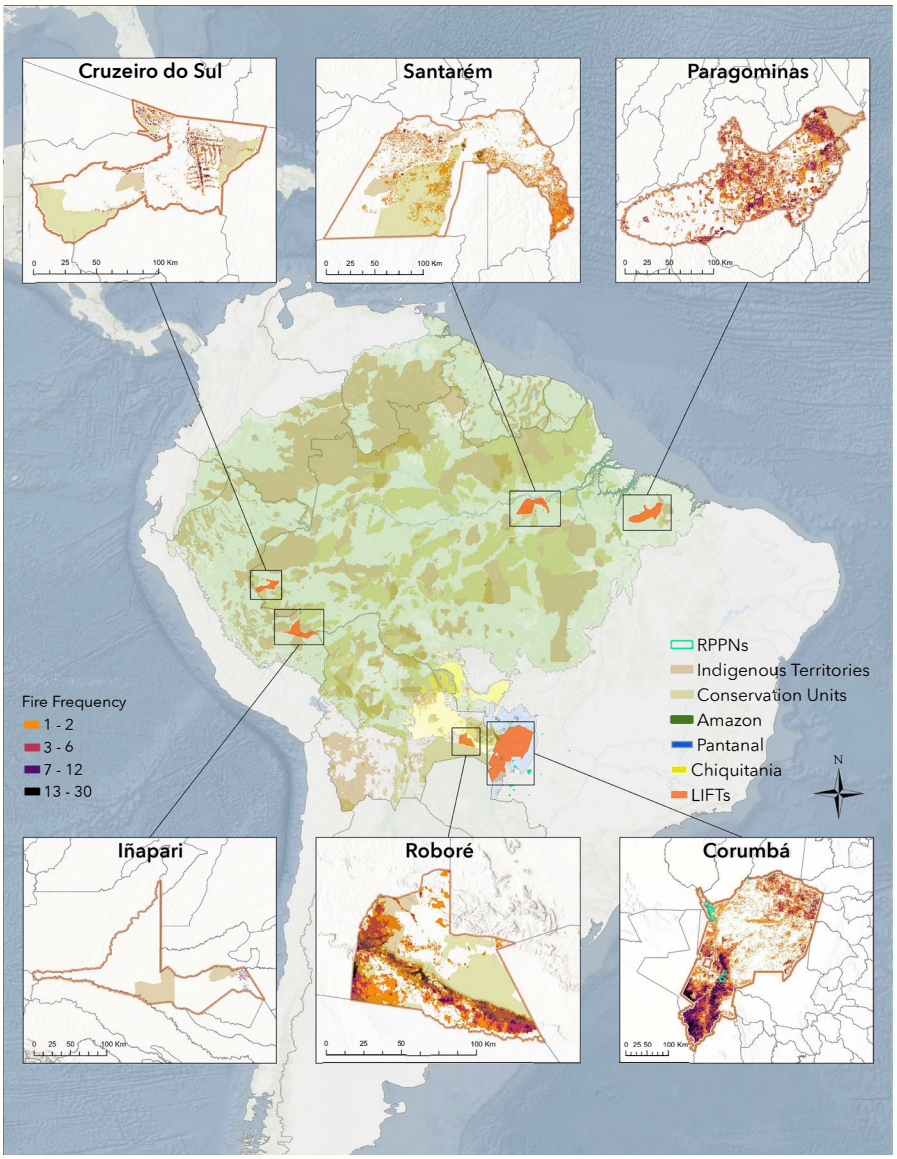


Figure 2: Map of the Initial Six LIFTs: *Clockwise from top left:* ***Cruzeiro do Sul****, Acre, Brazil - Fragile endemic forests defended by an innovative early warning system;* ***Santarém****, Pará, Brazil—A biodiversity corridor, where primary, protected forests are threatened by fire and defended by communities;* ***Paragominas,*** *Pará, Brazil - An old fire frontier, now a promising laboratory for REDD+, private investment, and community brigades for sustainable forest protection.* ***Corumbá****, Mato Grosso do Sul, Brazil - Pantanal biodiversity that was devastated by fire, which then catalyzed the hemisphere's most advanced fire detection system;* ***Roboré****, Santa Cruz, Bolivia - The Earth's most biodiverse, and least protected, dry forests, defended by community brigades;* ***Iñapari, Tahuamanu*** *Madre de Dios, Peru—A globally significant forest corridor where forest concession holders and regenerative ranchers are unexpected allies against fire. Map credit: N. Potter, Brando Lab, Yale University*

In the ***South America Fire Fund Strategy***, we outlined an integrated set of strategic levers —***Fire Prevention & Resilient Stewardship***, ***Enhanced Detection & Coordinated Rapid Response***, and ***Integrated Fire Information & Decision Systems*** — that when activated together can shift the system.

We have identified a slate of top-line biophysical and process indicators to measure progress, vetted them with local partners, established baselines and targets, and developed an experimental design that allows us to test the systematic application of interventions across our experimental sites.

This will allow us to pinpoint the interventions and conditions that make a material difference in fire occurrence and prepare them for scale and sustainability beyond the target geographies. The proposed indicators are shown in Figure 3, below.

South America Fire Fund — Indicators Framework

Green = Tier 1 (Universal) · Amber = Tier 2 (Multi-LIFT) · Grey = Considered but not selected by LIFT Partners

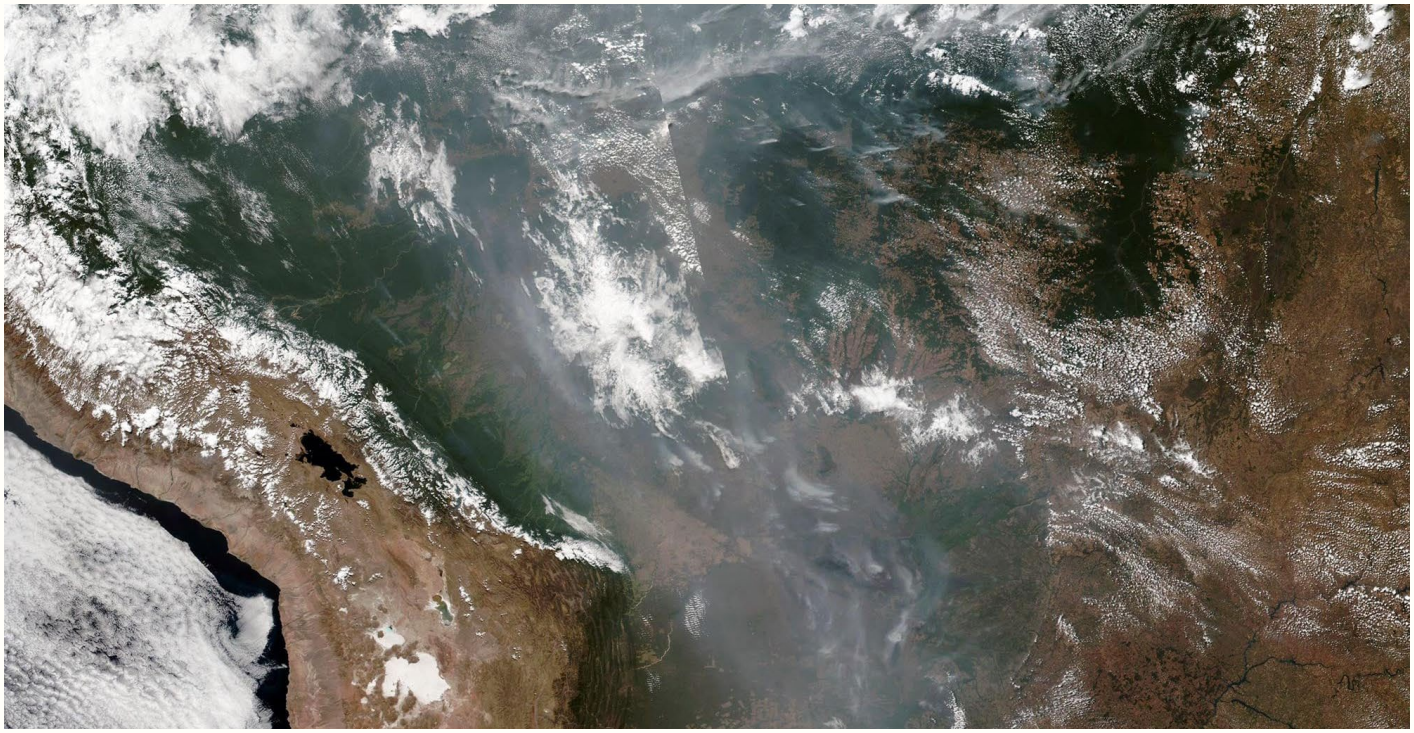
Indicator	Strategy	Tier	Generalized Baseline / Current Status	3-Year Target	LIFTs Applicable
TIER 1 — Universal Indicators (applicable to all primary LIFTs)					
Hectares burned in biodiverse and/or high-risk target areas	S1/S2/S3	Tier 1	5-year average burned area per LIFT, clipped to pre-mapped priority ecological zones. Historical series available for all LIFTs from 1985 (MapBiomas).	Specific targets set based on priority areas selected with LIFT consortia and calibrated for annual climatic variance.	All primary LIFTs
Response time to priority fires	S2/S3	Tier 1	Baseline response time ranges from 7 to 36 hours across LIFTS.	Reduction of 20-50% depending on LIFT-specific conditions	All primary LIFTs (phased baselines)
Number of escaped fires in target areas	S1/S2	Tier 1	Historical baseline of number of escaped fires from 10–15 yrs of remote sensing data for target areas.	50% reduced	All primary LIFTs (definition harmonized Year 1)
Number of target agencies and brigades using integrated decision support tools	S1/S2/S3	Tier 1	Baseline ranges from 0 to 9 organizations effectively using standardized tools	50% increase in organizations effectively using tools across all LIFTs, with a minimum of five in each LIFT.	All primary LIFTs
Reduction in ignitions during high-risk periods	S1	Tier 2	Remotely-sensed hot pixel data overlaid on land areas and properties during high-risk or no-burn periods.	50% percent reduction in ignitions during high-risk periods.	Selected by Brazil and Bolivia LIFTs. Potentially add Peru LIFTs.
TIER 2 — Multi-LIFT Indicators (applicable to several LIFTs)					
Hectares of post-fire area stewarded for resilience	S1	Tier 2	Active restoration activities in all LIFTs are <100 ha (zero in many) and not using science-based accelerated restoration methodologies.	Pilot areas applying accelerated restoration techniques and channeling innovative finance to scale. At least 100 ha under active restoration.	
Number of land users in target areas utilizing fire-free/fire-smart land management tools and practices	S1	Tier 2	LIFT-specific assessment based on current available tools and practices	% of targeted land owners and managers using fire-smart tools and practices	
Number of hectareas under fire-free/fire-smart land management	S1	Tier 2	200 hectares or less currently under fire-free management	At least 200 hectares additional per applicable LIFT consolidated under fire-free production systems	
Number of fire brigades per LIFT that achieve Brigade Capacity Level 1+ or 2 and Monitoring Level 2	S2	Tier 2	LIFT-specific readiness assessment	At least one 14-person brigade per LIFT at Brigade Level 1+/2 and Monitoring Level 2	
Detection of understory and difficult-to-detect fires	S3	Tier 2	Current methods still inadequate for detection of low-intensity, under canopy fires in Amazon.	Validated methodology demonstrates improvement in detection capacity for under canopy fires in the Amazon.	Research & university partners
Funding unlocked to ensure durability of interventions beyond outcome scoped for this grant	CC	Tier 2	Baseline of 0	$20-$50 million leveraged through financial and insurance products	
Resource partners collaborate to advance future Fund objectives	CC	Tier 2	No additional funding secured	$70 million additional funding supporting the South America Fire Fund strategy	

Figure 3: Indicators, Baselines and Targets. *Indicator baselines and targets in this table were developed in direct consultation with LIFT Orchestrator partners and reflect realistic ranges and goals across diverse LIFT contexts.*

Finally, this Operational Plan for the South America Fire Fund specifies activities, associated budgets, and partners to advance innovative financial mechanisms, behavior change interventions, breakthrough innovations in technology, and collaboration. This strategic package of interventions can turn the tide on fire—and the Fund will create the evidence and build the global community of practice needed for scaling and sustainability.

There is no time to waste. In 1997/98, the world experienced a strong El Niño phenomenon that caused massive fires in the Amazon and Indonesia. It was a watershed moment, the first time scientists and the public truly understood the damage that fire can cause in tropical forests, particularly when hot and dry conditions interact with large-scale degradation and edge effects. Since then, more frequent and severe drying in the Amazon, linked to major droughts in 2005, 2010, 2015–16, and 2023–24 have increased the likelihood that fires escape into forests and drive large-scale degradation.

This proposal comes at a critical moment. The European Center for Medium-Range Weather Forecasts (ECMWF) has released new data predicting that 2026-2027 will experience a strong El Niño phenomenon, which when coupled with the ongoing historic drought, has a high potential to trigger a devastating fire season. With the investment anchoring this transformative South America Fire Fund, we can still prevent devastating conditions from escalating into large-scale forest loss and pushing ecosystems irreparably past tipping points.



Captured in 2019—smoke from fires raging in the Amazon basin created a shroud across much of South America that was visible from space. Photo: NASA Worldview, Earth Observing System Data and Information System (EOSDIS).

Section 2: Theory of Change, Strategic Priorities, and Measures of Success

The South America Fire Fund Theory of Change emphasizes that destructive fire is a solvable problem if addressed comprehensively, strategically, and collaboratively. *The time for small solutions, working independently and siloed, is over if we truly aim to solve this problem.*

The core strategies reflect this approach. First, *the most effective solution for destructive fire is preventing ignition and escape.* Fires in these ecoregions are overwhelmingly human caused, and even in the context of higher temperatures and drought, fires require ignition.

Core Strategy 1 - Fire Prevention & Resilient Stewardship - is based on the premise that ignitions and accidental fire escapes can be dramatically reduced with the right information, motivators, and aligned incentives (including financial), to improve ecosystem stewardship.

Strategy 1 Key Indicators:

- *Number of escaped fires in target areas*[1]: Effective fire prevention and management strategies, combined with behavioral and financial incentives, will reduce ignitions and keep more fires from escaping control. (Also addresses Strategy 2)

- *Number of hectares under fire-free/fire-smart land management:* Behavioral and financial incentives will result in increased land under fire-free and fire-smart management systems.

- *Hectares of post-fire area stewarded for resilience:* Without active, science-based restoration, fire-damaged lands in South America are left vulnerable to repeat burns, biodiversity loss, and permanent ecological collapse. Innovation to accelerate restoration can reduce costs and logistical barriers, increase investment in restoration, and enable recovery at meaningful scales across fire-affected landscapes.

When fires do escape, rapid detection and coordinated response, powered by transformative technology, can enable us to manage them even under changing land use and climate conditions.

Core Strategy 2 - Enhanced Detection & Coordinated Rapid Response - asserts that fire response times are meaningfully reduced, and there is increased control of priority fires by well-equipped and trained fire brigades, acting in coordination, and given new tools and data for early detection and rapid response.

1. An escaped fire is an active fire event that originates within or enters a target intervention unit, crosses the intervention unit boundary, and burns a minimum area designated within the local (LIFT) fire management strategy before suppression is achieved or the fire self-extinguishes. Escaped fires are identified using remote sensing or local detection technologies (e.g., fire detection towers) cross-referenced against mapped intervention unit boundaries.

Strategy 2 Key Indicators:

- *Response time to priority fires*[2,3]: Faster detection, more efficient communication, and stronger coordinated brigades will reduce the time it takes to reach and engage priority fires. (Also addresses Strategy 3)

- *Hectares burned in biodiverse and high-risk target areas:* Rapid, effective suppression focused on priority areas will reduce the total area burned in the landscapes that matter most.[4]

Underpinning the success of these two core strategies, **Core Strategy 3** - **Integrated Fire Information & Decision Systems -** will increase the effectiveness of efforts to address critical fires with better and more timely fire detection, monitoring, risk, and impact information, rapidly analyzed and disseminated to practitioners, decision-makers, and the public as integrated decision-support or communication tools.

Strategy 3 Key Indicators:

- *Detection of understory and difficult-to-detect fires*: Improved detection of understory, underground (turf), and other hard-to-detect fires will enable faster, more effective response – reducing the severe environmental damage and biodiversity loss these fires cause. (Also addresses Strategy 2)

- *Number of target agencies and organizations effectively using standardized decision-support tools*[5]*:* When fire management tools are standardized, user-friendly, and sustainably integrated into agency workflows, adoption will grow and translate directly into better fire outcomes across prevention, detection, and response. (Also addresses Strategies 1 and 2)

- *Reduction in ignitions during high-risk periods:* Prevention plans, targeted, evidence-based communications, incentives, and behavior change will reduce dangerous ignitions — particularly critical during high-risk periods, when resources are already stretched, and when multiple fires risk merging into large, catastrophic wildfires. (Also addresses Strategies 1 and 2)

2. Response time is the elapsed time between the detection of a priority fire and the confirmed deployment of the first response resource to that fire, as recorded in standardized incident reporting logs. Record keeping and incident reporting are built into brigade capacity for Monitoring Level 2.
3. Priority fires are defined within a given fire management plan and are designated as part of standard brigade operating procedures at the time of fire detection. Priority fire designation criteria include fire distance to high-risk or target areas, weather-informed risk predictions (including spread potential), fire size, brigade capacity, and logistics (including access in remote areas).
4. Target areas are defined at the LIFT level. This indicator will be calibrated for climatic conditions and historical fire dynamics.
5. An agency or brigade is counted as effectively using an integrated decision-support tool if it meets all three of the following criteria: [1] regular use of the designated tool(s), documented by system access logs or standardized reporting; [2] demonstrated integration into at least one formal decision-making process, evidenced by incident reports, fire management plans, or after-action reviews; and [3] demonstrated operational independence, defined as the ability to operate and maintain the tool without direct external technical support, verified through structured assessment visits or key informant interviews.

Finally, our **Cross-Cutting Strategy, Monitoring, Evaluation, and a Validated Strategy for Scaling the South America Fire Fund**, surmises that successful interventions can be evaluated through an experimental design and robust monitoring and evaluation program, and that scaling and sustainability can be achieved in the medium term through building a formal network of scaling and resource partners, including unlocking public and private funds.

Photo: Mayangdi Inzaulgarat/Ibama

Section 3: Experimental Design & Target Intervention Geographies

Landscape Interventions for Fire Transformation (LIFTs) are target areas that provide place-based socioeconomic, environmental, and governance contexts to evaluate the Fire Fund's systemic intervention packages. LIFTs are a core component of the Fire Fund's experimental design.

The Fire Fund has an ambitious and rigorous, but feasible, program design that can support scientifically defensible causal inference about intervention impacts in specific implementation contexts, while still enabling learning and generalization across diverse settings. At the scale of the Amazon, Chiquitania, and Pantanal, conclusions will be framed as comparative learning (what worked in which biophysical, socioeconomic, and governance contexts), not a single pooled attribution claim. Importantly, *the treatment or intervention is the systemic package of coordinated interventions (levers) in the strategy.* While the selection of the exact same intervention may be impossible in each site, we will look for equivalency of each intervention (such as behavior change) in achieving the same effect. Thus, our design is intended to estimate the effect of the systemic strategy bundle, not to isolate which individual component mattered most. This will allow the program to infer which approaches are likely to transfer to other places with similar characteristics (biophysical, socioeconomic, and governance), even as interventions are adapted to local conditions. This approach enables us to learn effectively, and scale successfully, across a wide range of LIFT contexts.

For each LIFT site, we will employ a standardised monitoring approach that integrates Earth observation, participatory methods, and field sensor technologies, including drones, biodiversity monitoring, and local weather sensors. We will also apply a suite of statistical and analysis methods, described in more detail in the Monitoring and Evaluation and Experimental Design Annex.

To identify key intervention sites to demonstrate the effectiveness of this systematic approach across the Amazon, Pantanal, and Chiquitania regions, we developed a LIFT definition and core LIFT characteristics (Figure 4, below) in consultation with partners and a high-level expert strategic advisory group.[1] Potential LIFT sites were solicited from experts and evaluated against these criteria.

This proposal presents our vetted LIFTs geographies for applying these systematic interventions, including six LIFTs for Day 1 implementation. A secondary set of LIFTs are targeted for expansion with additional resources, which we will use the anchor funding to leverage.

An overview of each of the six initial selected LIFTs was included as Figure 2, and more detailed information on each of the six initial LIFTs is included in the LIFT Profiles Annex.

1. Alex Dehgan (Conservation X Labs), Ane Alencar (IPAM), Daniel Nepstad (Earth Innovation Institute), Doug Morton (NASA), Felipe Spina (Conservation X Labs), Luis Fernandez (CINCIA), Marcia Macedo (Woodwell Climate Research Center / Columbia University), Marion Adeney (Conservation X Labs), Osmar Bambini (umgrauemeio), Patricia Santos Silva (Brando Lab at Yale), Paul Bunje (Conservation X Labs)

In addition to alignment with the five Core Characteristics, some candidate LIFTs were ***not*** chosen for reasons including ecoregion exclusion (e.g., primarily Cerrado-Amazon transition LIFTs), partnership contexts, and dynamics of excessive conflict, especially around land grabbing, insecure tenure, or other illicit activities (e.g., Humaitá, Amazonas State, Brazil).

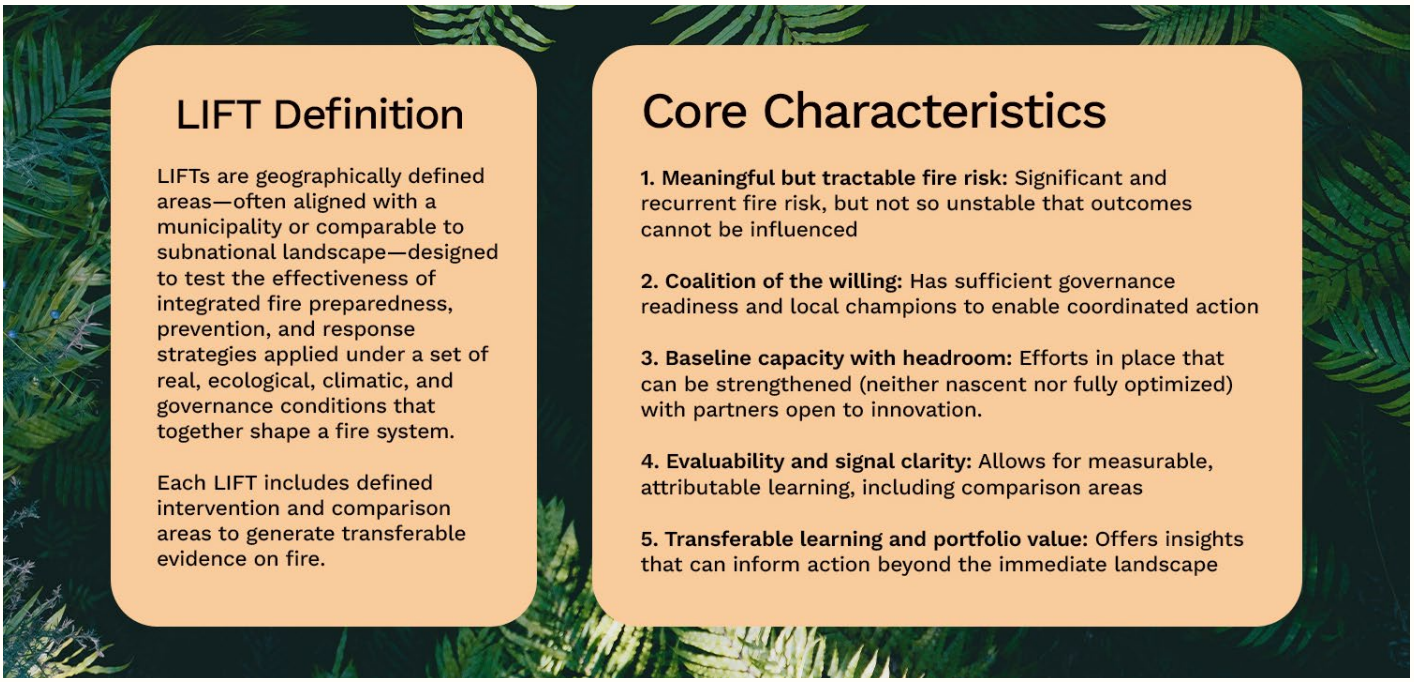


Figure 4: LIFT Definitions and Core Characteristics

After the selection of the potential LIFT sites, we also selected partner organizations (hereafter "LIFT orchestrators") for each LIFT. These are trusted on-the-ground conservation partners with decades of experience and credibility who already play leading or vital roles in current fire management efforts in the target countries and ecoregions. The LIFT orchestrators collected and synthesized baseline and target data, as well as data on fourteen contextual factors designed to provide an understanding of the biophysical, socioeconomic, and governance contexts, key stakeholders, capacity, and risks for each potential LIFT. They also evaluated each potential LIFT around readiness baselines and 3-year target levels for each Fire Fund Objective and Output.

The LIFT orchestrators, and other Fire Fund partners, will continue to contribute to the design of each LIFT plan. They are also already catalyzing a growing community of practice within and beyond the target ecoregions, integrating innovation throughout, and accelerating momentum for sustainability and scale.

Section 4: Operational Plan Overview

The South America Fire Fund will be implemented through six initial LIFTs across the Amazon, Chiquitania, and Pantanal, operating under a consortium model in which a set of trusted LIFT orchestrators collaborate on coordination and implementation within each geography. Cross-cutting strategic levers are integrated throughout all three Core Strategies. These are *behavior change, financial innovation, innovation and technology, and cross-border/cross-agency coordination*.

The Operational Plan has been developed to align with the anchor grant of $30 million, while also laying out the plan for the full $100 million South America Fire Fund that the anchor funding will unlock.

Core Strategy 1: Fire Prevention & Resilient Stewardship

Preventing fires from escaping in the first place is the highest-leverage intervention available. Implementation under Core Strategy 1 centers on four reinforcing levers: deploying integrated fire management and prevention plans across all LIFTs in coordination with sub-national governments and fire agencies; testing and scaling fire-smart and fire-free land management alternatives with communities and landholders; accelerating recovery of biodiversity in fire-damaged areas to prevent repeat burns; and deploying financial mechanisms that shift economic incentives toward standing forests. Behavior change and financial innovation workstreams are deeply embedded here, as the root cause of most destructive fire is economic. Fire is currently the cheapest and most accessible land management tool available to rural communities and smallholders.

Photo: Mayangdi Inzaulgarat/Ibama

Objective	Key Activities
Integrated fire management & prevention plans across all LIFTs	• Community and sub-national government fire prevention plans in place, including integrated fire management where appropriate • Improved risk forecasting technologies and innovative tools • Course on integrated fire management for all Brazil LIFTs
Fire-smart and fire-free land management practices tested and adopted	• Agroforestry, burn calendars tied to real-time risk data, and fire break innovations tested and deployed • Cross-LIFT behavior change campaign linking financial incentives and social norm interventions • Fire brigades positioned as community ambassadors for fire prevention
Accelerated restoration deployed in fire-affected high-biodiversity areas	• Deploy portfolio of innovations across restoration pipeline: seed tech, soil amendments, drone-assisted planting, AI-guided revegetation • Year-round employment of brigade members in off-season restoration activities • Accelerated Restoration Grand Challenge to source and test breakthrough solutions
Financial mechanisms shift incentives toward standing forests and fire-safe practices	• Embed wildfire in jurisdictional REDD programs to direct public flows to prevention and brigade support • Community/producer savings clubs, agricultural credit with fire criteria, parametric insurance • Outcome-based financing tied to verified fire and restoration results

Cross-cutting: Preventing Fires by Harnessing Behavior Change

Virtually every fire in the region has a human cause, making behavior change a central and cross-cutting mechanism through which fire prevention and response succeeds or fails. Core to this strategy is recognizing fire use as a collective action problem driven by social norms and economic necessity. Banning every fire hasn't worked, but changing behaviors to eliminate the most destructive fire (e.g., harnessing foresight for targeted burn windows, new technologies such as satellites, and data) could have a dramatic effect in minimizing escapes.

The Fire Fund's Behavior Change Plan focuses on four interconnected audiences: agricultural land users, broader communities, fire response teams, and fire governance committees. It seeks to understand the drivers and incentives needed to change their behaviors, and to identify the interventions to do so. For agricultural land users, the highest-return interventions are those that expand access to fire-smart alternatives while addressing the physical and economic barriers that make open burning the default choice. Individual behavior is shaped by a neighbor effect: land users act in part based on what they believe others around them are doing, making social norm interventions and community-level co-design as important as individual outreach.

Fire brigades, already identified through our research as trusted actors across LIFTs, will be positioned as on-the-ground ambassadors for fire prevention, linking the technology and response workstreams to community behavior change goals. A proposed cross-LIFT branding and public communications campaign will build collective ownership around responsible fire use, while LIFT-tailored engagement will address context-specific behavioral drivers through culturally grounded storytelling, pride of place, and peer exchanges. By the end of the test phase, the Fund will have produced a validated, LIFT-differentiated behavior change methodology with tested interventions and indicator metrics ready for scale.

Cross-cutting: Financial Innovation

The Financial Innovation Plan tests and deploys instruments that shift incentives, unlock and leverage additional public and private capital, and change behavior for fire management across all LIFT territories. Stream 1 provides technical assistance to embed wildfire in regional ("jurisdictional") REDD+ programs, enabling large public flows to pay directly for fire prevention activities, brigade support, real-time fire risk mapping, and integrated fire management. Stream 2 layers in community and producer savings clubs, agricultural credit with wildfire-related loan criteria, partial credit guarantees, outcome-based financing tied to verified fire results, and parametric insurance with rapid trigger-based payouts. Interventions will drive behavior change at every level: governments shift from treating fire as an emergency cost to a data-driven development priority; farmers and rural lenders adopt fire-safe practices because fire risk is now explicit in underwriting; communities and landowners pool risk collectively and invest in prevention; and corporate outcomes payers move from ad-hoc programs to structured multi-year performance contracts. By Year 3, the first jurisdictional REDD payments will flow, verified outcomes payments will be made, partial credit guarantees deployed, and the first parametric insurance products placed—setting the stage to mobilize $100M or more from public budgets, banks, corporate partners, and the insurance sector.

Cross-cutting: Innovation for Accelerated Recovery of Biodiversity

The Fire Fund seeks to accelerate post-fire ecological recovery in the Amazon, Chiquitania, and Pantanal from decades to years—treating restoration not as a downstream remediation activity but as an urgent fire prevention strategy in its own right. Once-burned forests are highly vulnerable to re-ignition, and forests that burn twice rarely recover; rapid intervention is therefore essential to prevent irreversible ecosystem transitions.

The Accelerated Restoration & Postfire Stewardship strategy supports LIFTs in deploying a portfolio of innovations to accelerate and scale restoration: improved seed availability and germination techniques including direct seeding methods and community-based seed networks; soil amendments and targeted microbial inoculants that restore degraded post-fire soils and accelerate growth of native forests; and intelligent planting approaches leveraging drone technology, AI-assisted decision-making and spatially patterned revegetation strategies that maximize ecological outcomes per dollar invested, including attracting seed dispersers to maximize biological integrity of the ecosystem.

Promising high-return investment areas include employing fire brigade members in off-season restoration activities, deploying agroforestry models that generate visible economic returns for communities, and piloting innovative solutions for rapid ecosystem regeneration. Economic and financial innovation—carbon and biodiversity credits, bioeconomy value chains, and fire suppression incentive mechanisms—will be essential to make restoration financially compelling at scale. We will also partner with large scale restoration companies to help scale up the solutions in other regions, and ensure their viability. We will use AI-based satellite and ground-based technologies to benchmark, test, and monitor acceleration and recovery of previously burned ecosystems.

Core Strategy 2: Enhanced Detection & Coordinated Rapid Response

When fires escape, the window for effective suppression is narrow—often no more than a few days. Strategy 2 focuses on responding within that window through four interconnected levers: strengthening brigade and agency capacity to a standardized minimum level across all LIFTs; deploying next-generation detection systems that can find fires earlier, at finer resolution, and under canopy and share actionable information and standardized workflows to stakeholders; prepositioning resources based on foresight analysis to get ahead of fire seasons; and building a three-level cross-border coordination structure that connects local operations to regional and national decision-making. Technology and cross-border collaboration workstreams are central here, as technology can allow us to leapfrog barriers to rapid response in the Amazon, Pantanal, and Chiquitania that can be as logistical and institutional as they are technical.

Objective	Key Activities
Integrated fire response plans and brigade strengthening enable enhanced coordination across brigades and agencies	• Integrated fire management and response plans in place across all LIFTs, including prepositioning of resources • Community and volunteer brigades strengthened to standardized minimum capacity level • Improved system integration, tools interoperability, and low-cost territorial intelligence deployed
Response time to priority fires meaningfully reduced through early detection and resource prepositioning	• LIFT-specific and generalized satellite and sensor systems for early, often, and precise fire detection including under canopy • Mobile tool for brigades and communities to track fire ignitions and spread (similar to Watch Duty or BC Wildfire Service applications) • Foresight analysis and resource prepositioning systems linked to detection, communication, and prioritization tools • Brigade Capacity Level and Data & Monitoring Technology Level frameworks deployed to assess and prioritize investments
Brigade suppression effectiveness improved through innovative equipment and emergency logistics	• Innovative, cost-effective equipment deployed for ecosystem-specific fire conditions (e.g., PPE tropicalization, automated response) • Fast mobilization of critical emergency supplies to front-line brigades in remote areas • South America Fire Grand Challenge open innovation mechanism to source transformative suppression technologies
Subnational cross-border coordination operational for real-time information exchange and mutual support	• Three-level Cross-Border Committee structure (Operations, Knowledge Generation, High-Level Strategic) established and operational • Cross-LIFT trainings and learning, protocol standardization, and solution development across Bolivia, Brazil, and Peru • Integration with existing regional coordination bodies

Cross-cutting: Technology and Innovation

The Technology and Innovation Strategy focuses on two main objectives: ensuring brigades in the LIFTs are well-equipped, trained, and ready for operations; and fostering the development and scaling of transformative technologies throughout the region. A brigade-first approach is vital, as frontline responders (particularly community and Indigenous brigades) are the most cost-effective and decisive points of intervention in wildfire management in South America. The highest return investments are those that strengthen brigade ecosystems, improve interoperability across fragmented systems, and implement inclusive territorial intelligence supported by reliable connectivity and participatory monitoring.

To organize this work, the Fund has created two assessment frameworks: Brigade Capacity Levels, which determine key needs for equipment, training, comms technology, and operational readiness; and Data and Monitoring Technology Levels, which assess capabilities in detection, information systems, and decision support. The Fund will analyze LIFT-specific needs, deploy priority equipment guided by the Levels, train brigades to use it effectively, and establish opportunities for cross-LIFT exchange and standardization. Field-based sensors, such as drones, camera traps, acoustic devices, and weather monitors, will complement Earth observation data by providing detailed, ground-level insights that satellites can't achieve. These tools are necessary for understanding local conditions, fire behaviour, biodiversity, and ecosystem recovery, aiding in the development of fire spread models and supporting effective ecosystem restoration strategies.

The Fund will also utilize innovation to overcome persistent logistical and institutional barriers and allow South America's fire management approaches to 'leapfrog' standard methods used in other fire-prone regions. Emerging technologies can enable faster, more localised, and resilient responses – including satellite monitoring with higher resolution and faster revisit rates, direct-to-device satellite communication, novel and semi-autonomous suppression tools, and distributed sensing and response systems. The Fund will increase coordination among leading actors and lay the foundation for a more effective innovation pipeline, including catalyzing a mobile app that increases situational awareness with real-time fire information and serves as a central hub for partners to aggregate data and models for field use. An open innovation mechanism will also accelerate and scale transformative solutions such as fire-smart agricultural methods and more effective brigade equipment. Conservation X Labs (CXL) is uniquely positioned to lead this agenda, leveraging expertise in conservation technology, open innovation, and global partnerships to develop an innovation ecosystem and pipeline that can efficiently identify, test, and scale high-impact solutions across the region.

Cross-cutting: Cross-border & Cross-Agency Collaboration

The three-level Cross-Border Collaboration Plan is designed to systematically connect territorial practice, share and advance technical knowledge, and coordinate political decision-making in support of effective fire management across all LIFTs. At the territorial level, the Operations Innovation Committee convenes Indigenous and traditional peoples' organizations, local brigades, producer associations, municipal teams, and civil society to co-design, test, and refine local fire management plans—generating systematized knowledge that enables comparison and replication across territories and borders. The Coordination for Knowledge Generation Committee converts these territorial experiences into shared

decision-support instruments by connecting technical agencies, universities, data platforms, and regional knowledge hubs. The High-Level Committee for Cross-Border Strategic Institutional Collaboration provides the political and institutional interface with national and subnational governments and regional organizations, creating a formal space for authorities to recognize innovations from LIFTs, align regulatory frameworks, negotiate cross-border cooperation, and optimize resource allocation. Together these three levels establish a continuous cycle of collective learning and innovation: local actors generate and test solutions, technical partners translate them into scalable practices, and political leaders remove institutional barriers and create conditions for expansion.

Core Strategy 3: Integrated Fire Information & Decision Systems

Strategies 1 and 2 depend on a functional data and decision-support backbone. Strategy 3 builds and deploys that backbone—connecting fire detection, risk modeling, and operational response data into integrated tools that practitioners, decision-makers, and communities can actually use. The critical gap across the region is not a shortage of data but a shortage of capacity to synthesize it into timely, actionable intelligence at the scale and resolution needed. AI and machine learning offer a scalable path to closing this gap: finer-scale risk models that move beyond blanket burn bans, automated detection and prioritization tools that can direct brigades to the highest-priority fires, and public-facing communication products that can translate complex data into clear guidance. Strategy 3 investments span detection infrastructure, risk modeling, public information systems, and agency-facing decision-support tools—utilizing open innovation mechanisms to accelerate the most critical technological advances.

Objective	Key Activities
Fires detected earlier and at finer spatial and temporal scales	• Deploy next-generation satellite detection systems with improved revisit rates, spatial resolution, and under-canopy detection capability • On-the-ground data download infrastructure to realize full impact of new satellite assets in real time • LIFT-specific sensor and monitoring networks for remote and high-risk areas
Fire risk models incorporate ecosystem-specific and nonlinear dynamics at finer scales	• Research and development of improved, finer-scale fire risk and spread models accounting for soil moisture, microclimate, and post-fire forest recovery • Deployed environmental sensors in LIFT areas fill key data gaps needed to create accurate fire spread models and fuel maps for the bioregions • AI/ML ecosystem-specific risk models across the three focal ecoregions integrated into unified platform and free mobile application • Targeted burn/no-burn window guidance replacing blanket bans, integrated with behavior change campaigns
Agencies and public access and use improved fire detection and risk information for decision-making	• Stage-gated public communications products automated and distributed via news outlets and community channels • Smoke and health impact analyses translated into actionable public guidance and used to further improve fire spread models • Open dashboards enabling municipalities and brigades to benchmark and iterate rapidly
Fire response agencies and brigades use coordinated, AI-enabled decision-support tools across jurisdictions	• Data integration from diverse sources into decision-support tools tailored to agency and brigade workflows • Cross-jurisdictional coordination platforms connecting suppression teams with real-time detection and prioritization data • Challenge or prize for data integration and decision-support tool development

The South America Fire Fund will be governed through a lean, adaptive management structure designed to maintain momentum and strategic coherence across six LIFTs in three countries. The Fund will have Advisory Groups of donors and global experts to provide structured input on the Fund's implementation and emergent insights. Fund leaders are committed to active engagement with donors.

The Fund will simultaneously build the community of practice, institutional relationships, and financial leveraging mechanisms needed to sustain and scale effective interventions. The financial innovation workstream is structured to mobilize public and private capital that can carry proven interventions to scale without continued dependence on philanthropic support.

Monitoring & Evaluation

A rigorous independent and concurrent monitoring and evaluation program—detailed in the Monitoring & Evaluation and Experimental Design Plan Annex—will track progress against primary and secondary indicators at the LIFT and portfolio level, enabling quarterly stage-gate reviews and real-time adaptive management.

Renaissance Philanthropy, the Fund lead, has a track record of building ambitious, field-level initiatives with large-scale philanthropic coalitions to address complex challenges. Central to their proven model is the role of an anchor funder, whose early commitment enables a broader set of partners to engage with clarity and confidence.

Within this framework, fundraising for the South America Fire Fund is intentionally sequenced. Meaningful outreach to additional funders begins once the anchor commitment is secured, as an initial seed investment shifts the nature of engagement with prospective co-funders. The anchor commitment would provide early capital and of equal importance, it would also signal credibility, readiness, and de-risk investments from other funders.

In anticipation of this next phase, Renaissance Philanthropy in partnership with CXL is building the infrastructure required to move efficiently once seed funding is secured. This includes a prospecting and sequencing strategy for the additional $70 million needed to reach a $100 million total fund. Prospective partners are being assessed and tiered based on relationship strength, alignment with the Fund's core priorities, and typical grant size or capacity, supporting a grounded path to full capitalization.