

Investment case from Brazil

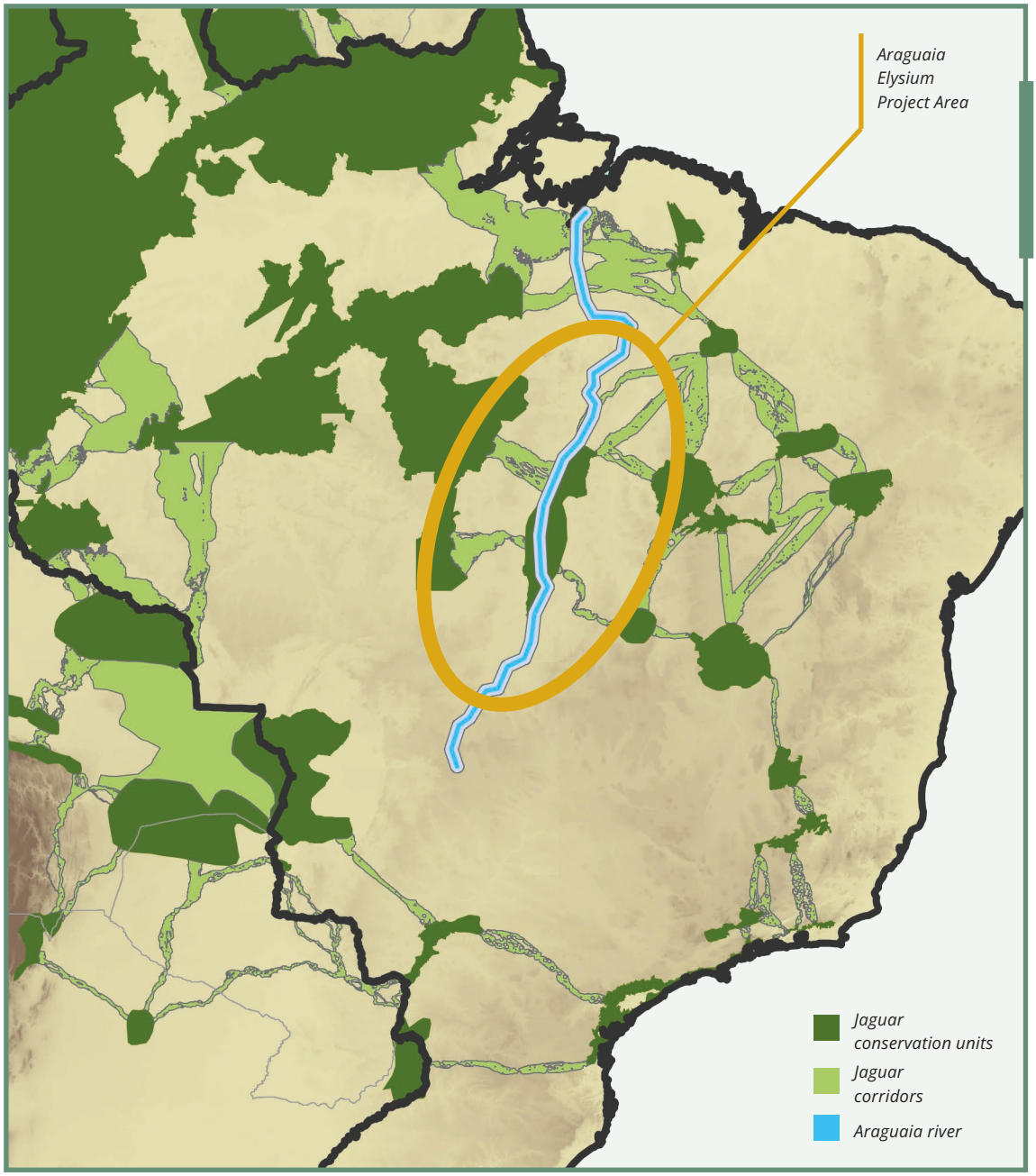
ELYSIUM CERRADO RESTORATION PROJECT, BRAZIL

The Elysium Cerrado Restoration Project aims to restore 20,000-30,000 hectares of degraded pastureland in the Brazilian Cerrado through native-tree silvopastoral and integrated crop–livestock–forestry (ICLF) systems. The project is designed to deliver ~3 million tonnes of CO_2 removals over 20 years, at least double farmers' net income over 7 years enhancing farm economics, and regenerate ecological corridors that connect the Cerrado, Pantanal, and Amazon. Elysium requires USD 60 million in blended finance, with strong potential to scale across another >30,000 hectares removing >9 million tCO2e over twenty years.

PROJECT OVERVIEW

- **Location:** Cerrado biome, Brazil — Mato Grosso, Mato Grosso do Sul, Goiás, and Tocantins
- **Lead Organizations:** AtmosClear Canada Inc. (ACCI) and Jaguar Corridor Investment Fund[1]
- **Supporting Partners:** FlowAgri (Brazil), Natural Capital Sustainable Solutions (Brazil), Ecosystem Regeneration Associates (ERA – Brazil), GEO*ESG Solutions (USA)
- **Founded:** 2018
- **Capital Sought:** US$60 million in blended finance for regenerative grazing, agroforestry establishment, farmer transition incentives and carbon project development

1 *https://www.jaguarlegacyfund.com/*



This investment case integrates:

- high-integrity removals under Verra's VM0047 methodology with additional biochar removals planned for after year 6,
- diversified revenue streams from cattle and agroforestry products,
- scientifically validated restoration pathways[1], and
- measurable social benefits reaching >1,500 rural people.

1 *https://www.bcg.com/publications/2025/brazil-resilience-for-the-future-a-viable-pathway-to-regenerative-landscapes-in-the-cerrado*

ACCI designed Elysium to address the rapid degradation of Cerrado cattle landscapes, where decades of deforestation and continuous grazing on nutrient-poor soils have reduced productivity and ecosystem function, depleted soil carbon, and increased vulnerability to drought. The project deploys native tree–based silvopastoral systems (including *Dipteryx alata* – baru, *Acrocomia aculeata* – macaúba and other species) to restore soil structure, rebuild organic matter, and stabilize water cycles. These systems are among the most viable pathways to regenerate Cerrado ecosystems and biodiversity under increasing climatic stress.

The Brazilian program focuses on restoring 20,000–30,000 hectares, generating ~3 $MtCO_2e$ over 20 years through above-ground biomass, soil carbon, and application of biochar produced from tree crop residues. Elysium also increases livestock productivity by using bio-inputs for pastures, improving forage biomass, shade, water infiltration, and soil fertility—fundamental bottlenecks in Cerrado beef systems. Farmers adopting the system can achieve 2–3× higher net income in approximately the 7th year, supported by technical assistance, restoration financing, and access to new value chains for tree products.



Beyond Brazil, ACCI is developing similar projects in Colombia and Peru and providing advice to partners in other countries–expanding the model to >30,000 hectares and >9 $MtCO_2e$ of removals over 20 years. The regional pipeline mirrors Brazil's structure but adapts species and design to Andean foothill ecosystems (Colombia) and silvopastoral rehabilitation of degraded Amazonian pasture (Peru) and ecosystem-specific approaches in other countries.

The project is built on a blended-finance architecture combining carbon pre-purchase and forward payments, concessional debt through the Jaguar Corridor Investment Fund, and equity participation. This structure reduces capital risk, accelerates farmer adoption, and contriutes early liquidity for restoration activities before carbon verification.

SUSTAINABLE PRODUCTION MODEL

The Elysium sustainable production model integrates native-tree silvopastoral systems, regenerative livestock management, and diversified agroforestry production to restore degraded Cerrado pastures and improve farmer profitability. The model is grounded in the scientific evidence presented by Ramos et al. (2025), who identify mixed-tree systems—including *Dipteryx alata* (baru) and *Acrocomia aculeata* (macaúba)—as among the most effective nature-based solutions for rebuilding soil organic matter, reducing erosion, and increasing drought resilience in the Cerrado biome.

At its core, Elysium transitions farmers from continuous extensive grazing on nutrient-poor soils to integrated crop–livestock–forestry (ICLF) and silvopastoral systems designed for long-term ecological function and economic performance.

ICLF systems combine native trees, perennial vegetation, and rotational grazing to improve ground cover and biomass production, enhance forage availability, and stabilize microclimates. The introduction of baru, macaúba and other native trees provides both ecological benefits—deep roots, organic matter accumulation, and shade—and economic diversification through edible nuts, oils, and high-value co-products. According to the project's technical outline, tree densities range from 150–300 trees per hectare depending on species, slope, soil type, and grazing intensity.

Livestock management follows regenerative principles focused on bio-inputs, rest–grazing cycles, improved distribution of manure, and reduced pressure on vulnerable areas. These practices increase stocking efficiency, reduce mortality under drought conditions, and enhance overall productivity. Complementing this, biochar produced from agroforestry residues is incorporated into the soil to improve structure, cation exchange capacity, and water retention—an approach highlighted in ACCI's technical documents as particularly effective for sandy Cerrado soils.

Digital monitoring tools combine remote sensing, soil sampling, and ecosystem indicators to track vegetation recovery, biomass accumulation, biodiversity recovery, and carbon gains in line with Verra's VM0047 reforestation and VM0044 biochar methodologies. This system ensures transparent and verifiable carbon accounting while enabling adaptive management. Technical assistance and farmer aggregation mechanisms help reduce transaction costs, facilitate adoption of new practices, and connect producers to restoration financing.

Together, these elements form a scalable production model that simultaneously increases farmer income, restores ecological function, and creates a diversified portfolio of commodities and ecosystem services. Elysium demonstrates how regenerative beef production, agroforestry value chains, and carbon markets can be integrated into a coherent landscape-level solution tailored to the challenges of the Cerrado.

ENVIRONMENTAL, SOCIAL & ECONOMIC IMPACT

The project is implemented in the Brazilian Cerrado, the world's most biodiverse savanna, strategically located adjacent to both the Amazon and Pantanal biomes. These restoration activities contribute to maintaining ecological connectivity, water regulation, and biodiversity recovery across these globally significant ecosystems.

The Elysium Cerrado Restoration Project delivers measurable landscape regeneration, strengthened rural livelihoods, and long-term economic resilience through improved farm productivity, diversified income streams, and ecosystem service generation. In the Brazilian Cerrado—where more than half of native vegetation has been lost—decades of continuous grazing on nutrient-poor soils have reduced productivity and increased vulnerability to drought.

Scientific evidence from Ramos et al. (2025) shows that mixed native-tree systems, particularly those using *Dipteryx alata* (baru) and *Acrocomia aculeata* (macaúba), are among the most effective pathways for rebuilding soil organic matter, reducing erosion, stabilizing water cycles, and restoring ecosystem function. Through this approach, Elysium will restore 20,000-30,000 hectares of degraded pasture and is projected to generate ~3 million tonnes of CO_2 removals over 20 years, combining biomass growth, soil carbon increases, and biochar from agroforestry residues (Table 1).

Table 1. *Environmental Indicators*

Indicator	Baseline	Year 20 projection	Notes
Area restored	0 ha	20,000–30,000 ha	Cerrado degraded pasture
Crabon removals	0 tCO_2e	~3,000,000 tCO_2e	Biomass + Soil Organic Carbon + biochar
Trees density	<10 trees/ha	150–300 trees/ha	Baru, macaúba and other species
Vegetation cover	15–20%	55–60%	Based on Cerrado benchmarks
Water infiltration	Low	+50%	Tree roots + soil organic matter

Beyond carbon, the project improves biodiversity by reestablishing ecological links along the Araguaia River and across the Cerrado–Pantanal–Amazon interface, supporting jaguars, large herbivores (e.g., peccaries), pollinators, and bird communities. Monitoring systems aligned with Verra's VM0047 and VM0044 methodologies use satellite imagery, soil sampling, vegetation assessments, and emerging eDNA tools5 to ensure transparent, verifiable, and science-based reporting of ecosystem recovery. Regionally, the Elysium portfolio being developed in Brazil, Colombia, and Peru is expected to restore more than 30,000 hectares and remove over 9 million tCO2e over 20 years, forming one of the largest restoration pipelines in Latin America.

Socially, the initiative strengthens rural livelihoods by restoring native species on approximately 100 cattle farms in Brazil, reaching more than 1,500 people through training, employment, and diversification of production systems. New jobs emerge in seed collection, nursery operations, planting crews, agroforestry management and supply chains, and environmental monitoring—providing opportunities for women and youth.

Technical assistance ensures that producers gain the skills needed for regenerative grazing, tree cultivation, and compliance with carbon methodologies, improving management capacity and long-term resilience. Partnerships with local associations and commodities value chain actors will enable future expansion to 200 or more farms, scaling restoration benefits across entire landscapes. A partnership with a local financial institution could facilitate scaling to additional farms.

Economically, Elysium significantly increases the viability of cattle production in degraded Cerrado areas. By year seven, participating ranchers are expected to achieve 2–3× higher net income, driven by improved forage production, reduced drought losses, and additional revenue from baru nuts, macaúba oil (and other derivatives), and other tree-based products. The Brazilian project is projected to generate at least USD 40 million in carbon credit revenues over 20 years, supported by a blended-finance structure that includes a carbon pre-purchase and forward agreement plus loans through the Jaguar Corridor Investment Fund and other lenders. This financial architecture reduces risk, enhances access to credit, and enables producers to adopt regenerative systems without assuming high upfront costs. Over time, productivity gains, diversified income, and ecological restoration create a stable foundation for profitable, climate-resilient cattle production.

Table 2. *Economic and Social Indicators*

Category	Indicator	Value
Social	Farms engaged	~100
Social	People benefited	>1,500
Economic	Increase in net income	2–3× in approx year 7
Economic	Carbon revenues	>USD 40M (20 years)
Regional Scaling	Total removals	>9 $MtCO_2e$ (Brazil + Colombia + Peru)

FINANCING & INVESTMENT OPPORTUNITY

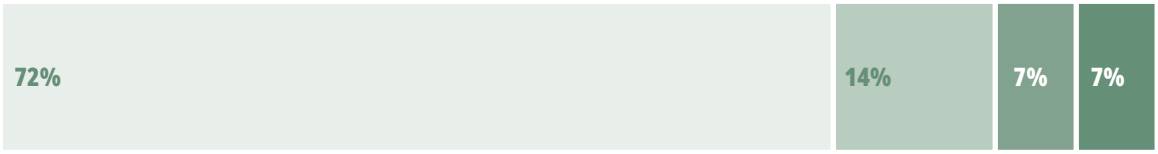
Current Stage

The project is in the development and de-risking phase in Mato Grosso do Sul and Mato Grosso, with planting scheduled to begin in 2026. Implementation will scale progressively to reach 20,000–30,000 hectares by 2032, aligned with land availability, farmer onboarding, and carbon methodology milestones.

Capital Required

USD 60 million, mobilized through a blended structure combining concessional debt, carbon pre-financing, and strategic equity. Negotiations with financial partners and carbon and commodities buyers are currently underway.

Use of Funds



- **72% –** Land and soil assessments, due diligence, land preparation, seedling production, tree planting, regenerative grazing support, agroforestry establishment, and farmer technical training.
- **14% –** Farmer transition financing and incentives, including on-lending mechanisms with partner banks under the blended-finance structure.
- **7% –** Carbon project development (VM0047): documentation, baseline studies, validation, registration, and training in ecosystem service measurement. Additional funds will be applied to develop the biochar component of the project once the main project is underway with biochar application expected to begin in year 7.
- **7% –** Monitoring, reporting, and verification (digital Monitoring Reporting & Verification System), environmental and social safeguards, and compliance with Verra standards, IFC Performance Standards, and related certification frameworks.

(All categories include administrative, management, and legal costs)

EXPECTED RETURNS

The project is expected to achieve a **~30% internal rate of return (IRR) over 20 years**, *driven by verified carbon removals, agroforestry revenues (baru nuts, macaúba oil, other fruits and tree products and derivatives), while also increasing livestock productivity from restored pastures. A portion of carbon credits will be pre-sold at competitive prices for reforestation, soil removal and biochar, providing early liquidity and risk mitigation. Anticipated return from carbon credits are US$20-30 each with a higher price expected for biochar-related removals. Future issuances will be sold after verification. Biodiversity and ecosystem co-benefits may generate additional value through emerging Nature Credit markets if there is demand.*

INVESTOR VALUE PROPOSITION

For Carbon & Impact Investors

- Long-term access to high-integrity carbon removals certified under Verra's VM0047 Reforestation and VM0044 biochar methodologies.
- A portion of carbon credits pre-sold at competitive prices, with scalable future volumes.
- Strong biodiversity co-benefits linked to the restoration of priority corridors in the Cerrado–Pantanal–Amazon interface.

For Commercial & Financial Investors

- ~30% projected IRR with diversified revenue from carbon, agroforestry products, and improved cattle performance.
- Blended financing through JCIF (Jaguar Corridor Investment Fund) and other sources reduces risk and enhances early-stage liquidity.
- Scalable model with a broader portfolio under development in Colombia, Peru and other countries, enabling multi-country exposure.

For Philanthropic & Public-Good Funders

- Restoration of 20,000–30,000 hectares of degraded Cerrado pasture.
- Improved livelihoods for >1,500 rural people, including women and youth.
- Restoration of ecological corridors and climate resilience across a priority biome.
- High alignment with SDGs, gender-responsive development, and climate adaptation priorities.

FURTHER READING & KEY REFERENCES

- Verra VM0047 Afforestation, Reforestation, and Revegetation Methodology, *https://verra.org/methodologies/vm0047-afforestation-reforestation-and-revegetation-v1-1/*
- Ramos, Arthur; Unnikrishnan, Shalini; Munhoz, Matheus; Moino, Lucas; Bugas, Jack and Lacanna, Santino; 2025. Report: Resilience for the Future: A Viable Pathway to Regenerative Landscapes in the Cerrado, Boston Consulting Group. *https://www.bcg.com/publications/2025/brazil-resilience-for-the-future-a-viable-pathway-to-regenerative-landscapes-in-the-cerrado*
- IFC Performance Standards (environmental & social compliance) *https://www.ifc.org/en/insights-reports/2012/ifc-performance-standards*

OUR CONTACTS

Sid Embree,
AtmosClear Canada Inc., Director
sid@atmosclear.org

Fiona Flintan, ILRI, STELARR lead *f.flintan@cgiar.org*
Lennart Hientz, ILRI, global livestock investment specialist
l.hientz@cgiar.org

STELARR (**Sustainable Investments for Large-Scale Rangeland Restoration**) facilitates private sector finance for rangeland restoration through sustainable livestock value chains. STELARR is funded by the **Global Environmental Facility (GEF)**, implemented by the **International Union for Conservation of Nature (IUCN)** and executed by the **International Livestock Research Institute (ILRI)** supported by the **International Center for Agricultural Research in Dry Areas (ICARDA)**, the **Alliance of Bioversity and the International Center for Tropical Agriculture (CIAT)**, the **Center for International Forestry Research and World Agroforesty (CIFOR-ICRAF)**, the **Sustainable Fibre Alliance** and **GMV**.
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Photo: Mato Grosso cattle - Barra do Garcas region. **Design**: Federico Pinci, *http://www.federicopinci.info*

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