

1.5°C

Embrace The Forest

Technologies for Wildfire Management

Resilient Territories • Protected Communities • Living Economies

Discover more



Embrace **the Forest**

Embrace the Forest is a collective response to the advance of uncontrolled fire.

Built through a cross-sector and multi-stakeholder approach, the program recognizes the value of biological and cultural diversity, integrating technology, governance, and traditional knowledge to strengthen territories and protect lives.

The combination of technological innovation, community coordination, and respect for local territories creates resilience and ensures that forests and people remain alive in a changing climate reality.



The Origin

The **Brazilian Pantanal** is the world's largest wetland biome, known for its unparalleled biodiversity.

In 2020, it faced one of the greatest environmental tragedies in history:

of its
15,6 million
hectares

3.9
million
were consumed by fire

about
26% of the
total area.

The “Serra do Amolar” region was among the most affected, with 97% devastated due to extreme drought and the rapid spread of flames.

From this scenario emerged a movement that now inspires the entire country: **Embrace the Pantanal.**

Embrace the Pantanal (2022–2025)

The birthplace of an environmental transformation

Embrace the Pantanal marked the beginning of a structural change in how Brazil addresses wildfires. Created in 2022, the project united cutting-edge technology, territorial coordination, and local knowledge to transform a biome into a living laboratory of environmental innovation.

Through the **Pantera system**, the Pantanal began to be monitored **24/7**, with real-time data on fire outbreaks, propagation, and risk.

The results speak for themselves

**65% average
reduction in
burned areas**

and the creation of a collaborative prevention and response network that now serves as a national benchmark.

Results that inspire the future:

3,5 mi.
hectares monitored

R\$ 10 mi.
invested over four years

+3 mi.
people benefited

6
Indigenous peoples
integrated into management

16
municipalities impacted

~65%
reduction in burned area

20 mi.
tons of CO₂ emissions avoided



Embrace the Pantanal (2026–2030)

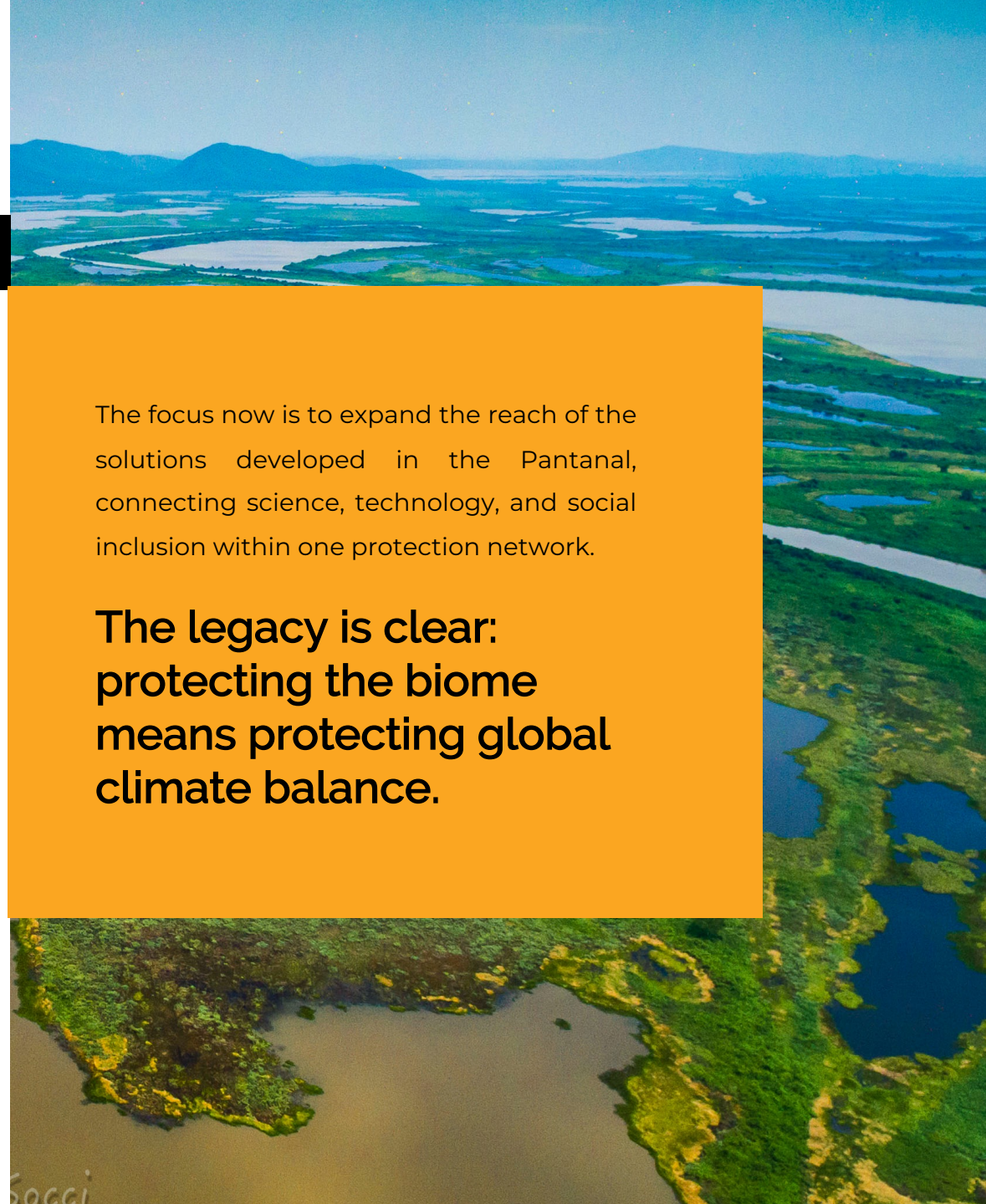
Our future

The next phase consolidates **Embrace the Pantanal** as an international reference in integrated fire management.

The **11 Pantera towers** will continue to operate in synergy with community brigades, environmental agencies, and traditional peoples, ensuring active surveillance over one of the planet's most valuable ecosystems.

The focus now is to expand the reach of the solutions developed in the Pantanal, connecting science, technology, and social inclusion within one protection network.

**The legacy is clear:
protecting the biome
means protecting global
climate balance.**



The Pantanal as a **Living Laboratory** of Environmental Innovation

Embrace the Pantanal is the foundational pillar of the **Embrace the Forest** strategy.

It was in the heart of the world's largest wetland biome that the **Pantera technology** was tested, improved, and validated at a territorial scale.

The combination of intelligent surveillance, real-time data, and community action transformed how fire is forecasted, monitored, and fought in Brazil.

The model created here now inspires new projects across different biomes, from the Amazon to the Cerrado, proving that science and social engagement can move together to protect forests.

National Expansion

Geographic coverage (2025):

8 projects

under implementation

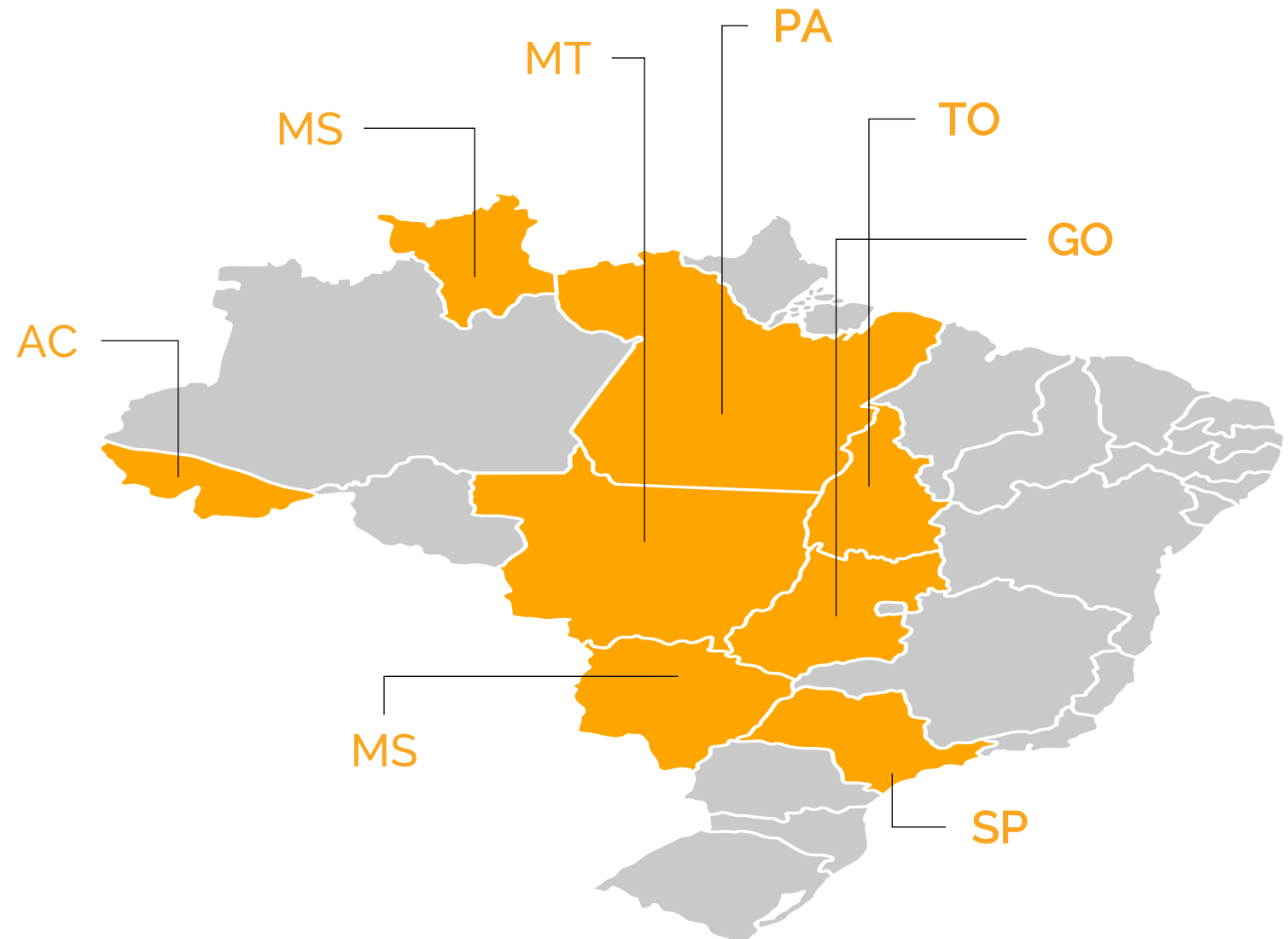
Expansion from

3 to 11

active fronts

266% ↑

growth



5,7 million

hectares monitored (2024)

20 million

tons of CO₂ avoided since 2022

Environmental
and Social
Impact

90%

reduction in burned
areas in critical regions

Thousands
of people

impacted across five biomes



Financial Impact

(next 18 months)

Projected investments:

**R\$11–16.5
million**

in contracts and implementation

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NEW PROJECTS

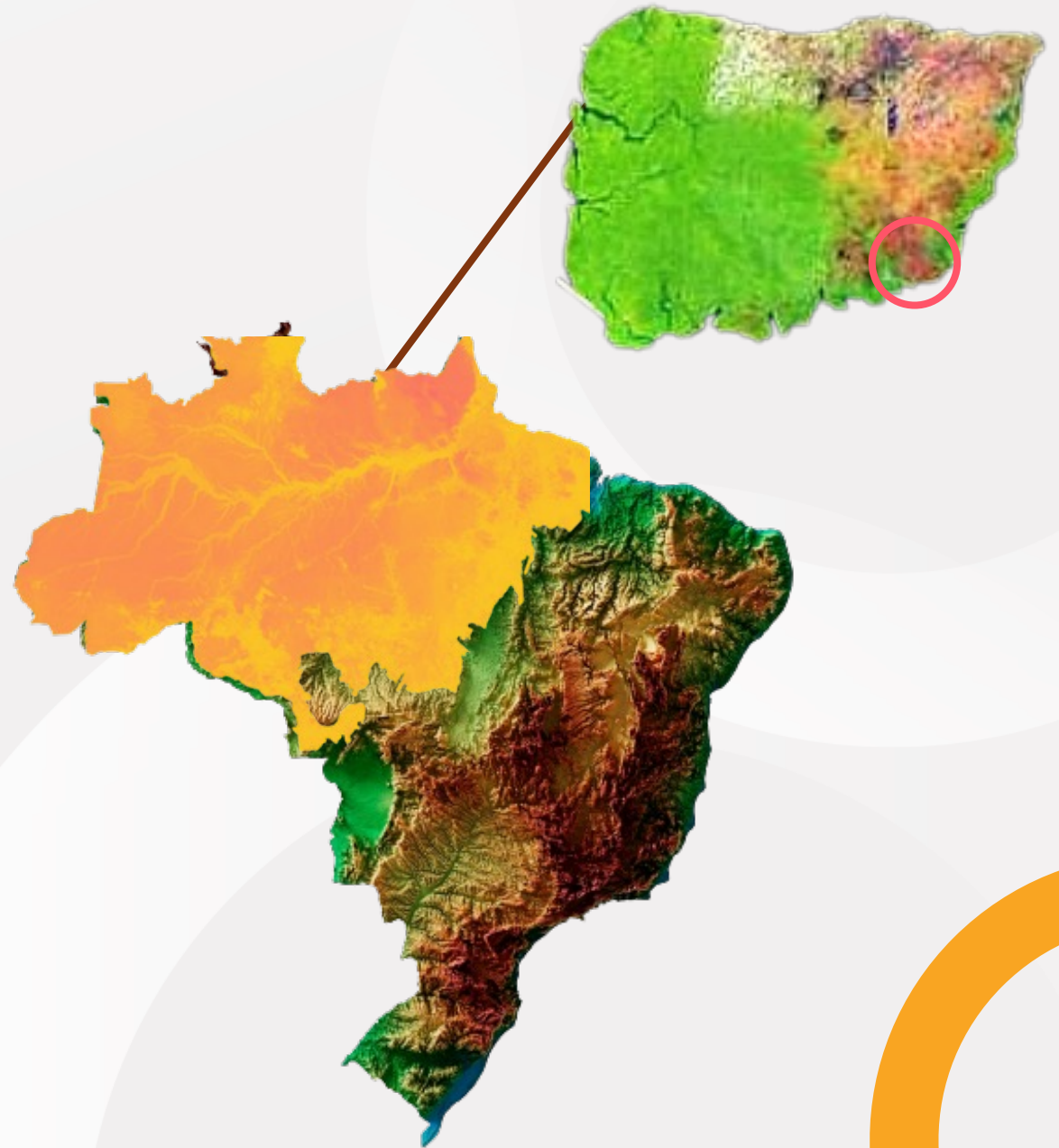
Embrace Marajó

Embrace **Marajó**

Benefited Brigade: *Filhas do Fogo – Marajó Observatory*

The first stage, financed by the **Clean Air Fund** and **Instituto Ar**, includes the installation of one monitoring tower covering 100,000 hectares.

Implemented by **umgrauemeio**, it is part of the **Embrace the Forest strategy** — combining **Pantera technology**, community coordination, and local partnerships.



Fire impact in Marajó (2020–2024):

- ~900,000 hectares burned (average 180,000 ha/year)
- In 2024 alone, fires affected 300,000 ha — about 6% of the island

Expansion potential:

- +9 towers in Portel, Melgaço, Soure, Salvaterra, Cachoeira do Arari, and Breves
- Total coverage: ~985,000 hectares (~20% of the island)

Estimated investment (36 months):

- R\$12,000/month per tower (operation)
- R\$150,000 per tower (installation)
- R\$450,000 for training 30 brigade members (~R\$15,000 each, including PPE, tools, and capacity building)

Custos estimados:

Item	Valor (R\$)
Setup torres	1.350.000
Operação (MRR)	3.888.000
Treinamento + Equipamentos	450.000
Total geral estimado	~R\$ 5.688.000

Expected results:

- Protection of ~1 million hectares
- Reduction in burned areas and response time
- Strengthened local capacity and community inclusion

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NEW PROJECTS

Embrace Roraima



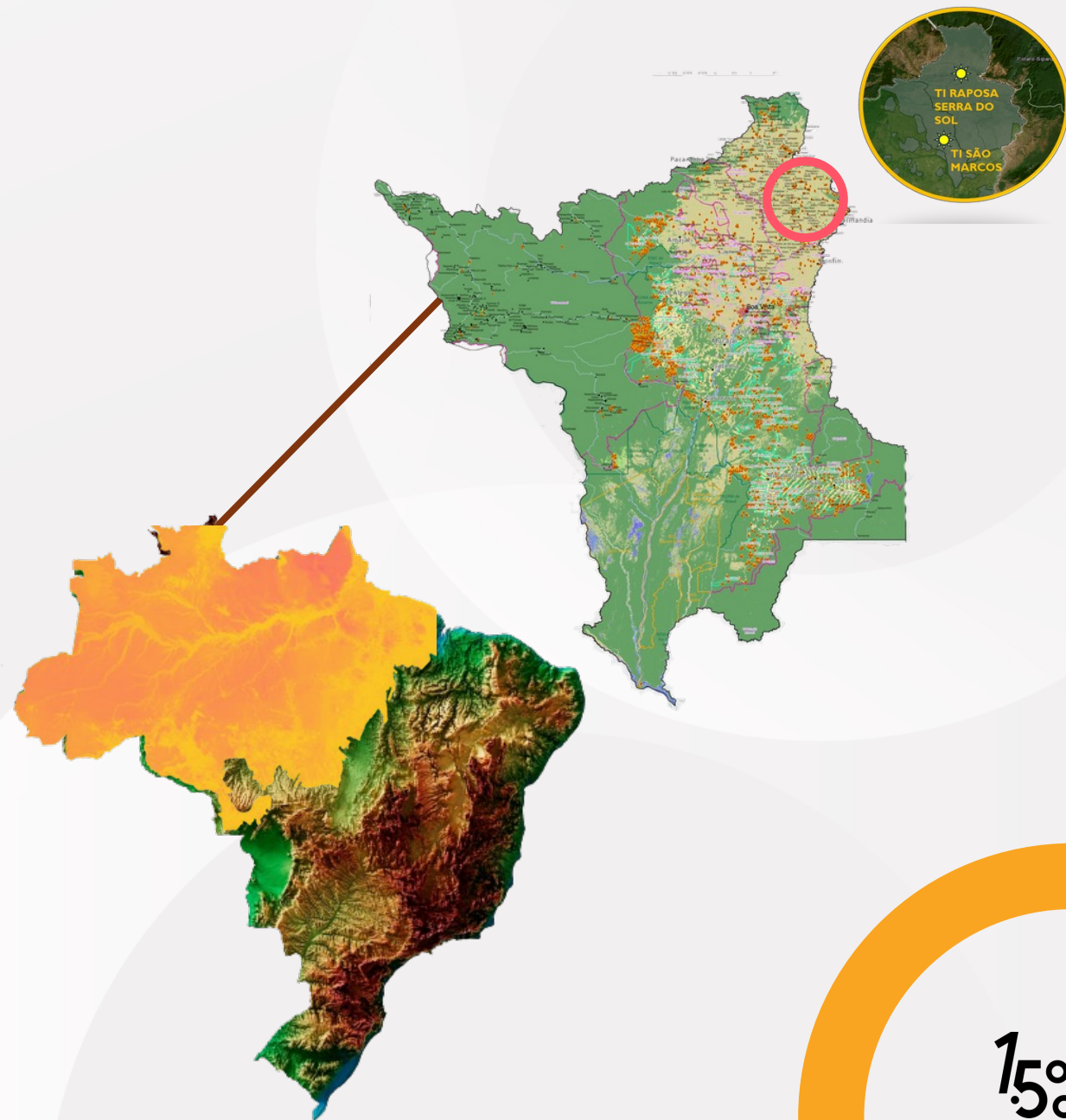
Embrace **Roraima**

Benefited Brigade: *CIR – Roraima Indigenous Council*

Indigenous Territories: Raposa Serra do Sol and São Marcos

The project strengthens territorial governance and climate resilience across approximately 1.5 million hectares distributed among 12 municipalities.

Currently, the region is digitally monitored through Pantera and the Indigenous Situation Room, coordinated by CIR.



Fire impact (2020–2024):

- Average 700,000 ha/year burned, peaking at 1.2 million ha in 2023
- Digital monitoring enabled early alerts and stronger local response

Expansion potential (2025–2027):

- Installation of the first Pantera tower within Indigenous territory in the Legal Amazon
- Expansion to +5 towers by 2027
- Combined coverage (digital + physical): ~600,000 ha
- 50 Indigenous agents trained in monitoring and rapid response

Estimated investment (2025–2027):

Item	Quantidade / Período	Valor Unitário (R\$)	Valor Total (R\$)
Setup das torres	6 torres	150.000	900.000
Operação (MRR)	6 torres × 36 meses	12.000/mês	2.592.000
Treinamento e equipamentos	50 brigadistas indígenas	15.000	750.000
Total geral estimado	—	—	≈ 4.242.000

Expected results:

- 30–40% reduction in average annual burned area
- Strengthened Indigenous territorial governance

NEW PROJECTS

Embrace Chapada dos Veadeiros

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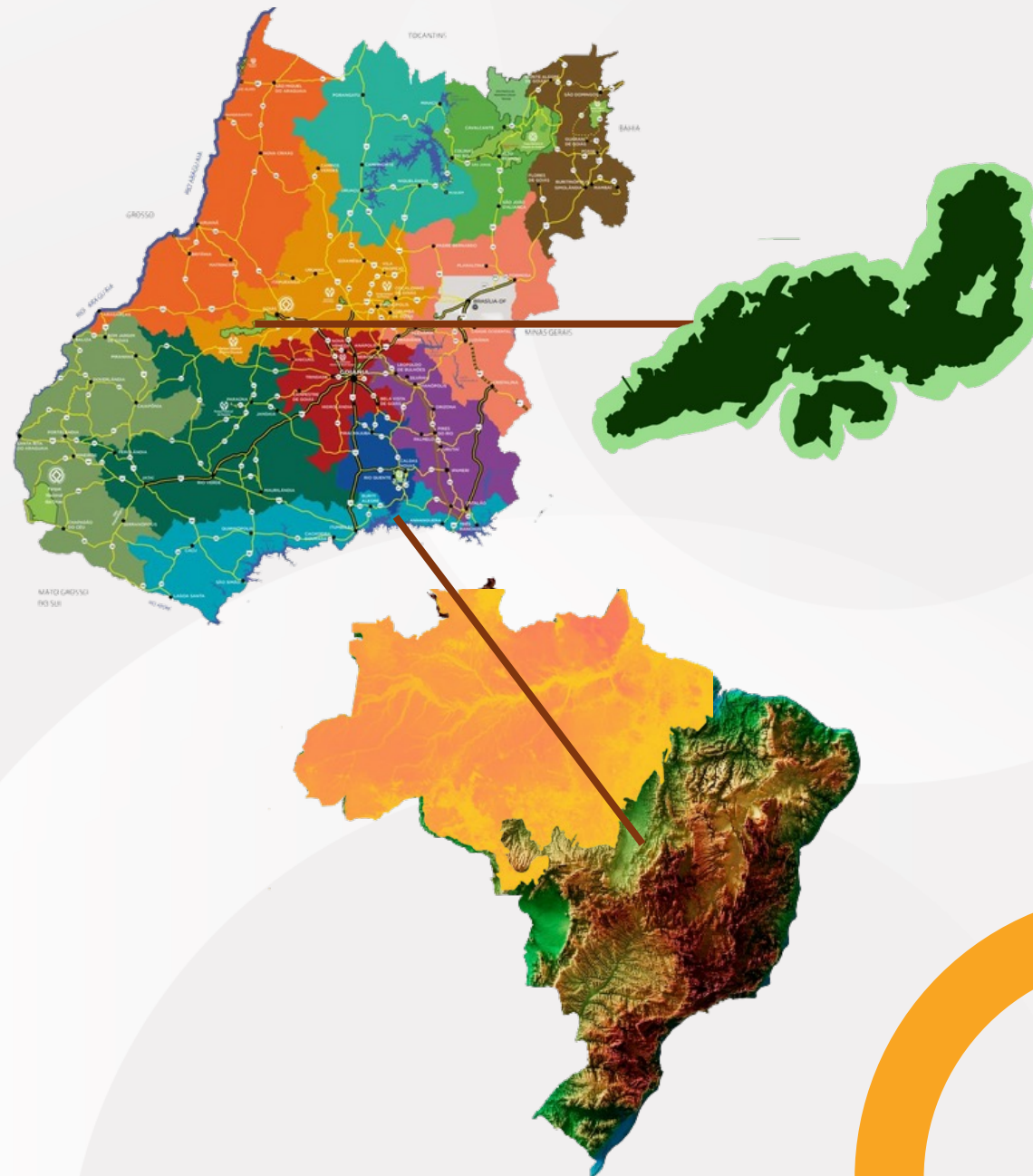
Embrace **Chapada dos Veadeiros**

Benefited Brigade: *BRIVAC – Cavalcante Volunteer Environmental Brigade*

Status: in progress (pro bono digital monitoring)

The project enhances fire monitoring and management in the Cerrado, in partnership with BRIVAC, ICMBio, and Ibama.

It currently operates through a pro bono digital system, expanding remote surveillance of the **Chapada dos Veadeiros National Park** and its surroundings.



Fire impact (2020–2024):

- Annual average: 86,000 ha burned, reaching up to 110,000 ha in 2025
- The advance of flames affects biodiversity, tourism, and community safety

Expansion potential:

- Digitally monitored area: ~240,000 ha
- Planned installation of up to 5 Pantera towers, covering ~500,000 ha

Estimated investment:

Item	Quantidade / Período	Valor Unitário (R\$)	Valor Total (R\$)
Setup das torres	5 torres	150.000	750.000
Operação (MRR)	5 torres x 36 meses	12.000/mês	2.160.000
Treinamento e equipamentos	40 brigadistas BRIVAC	15.000	600.000
Total geral estimado	—	—	≈ 3.510.000

Expected results:

- Up to 40% reduction in burned area
- Integration of data, surveillance, and community action
- Biodiversity protection and consolidation of Chapada as a fire management model in the Cerrado

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NEW PROJECTS

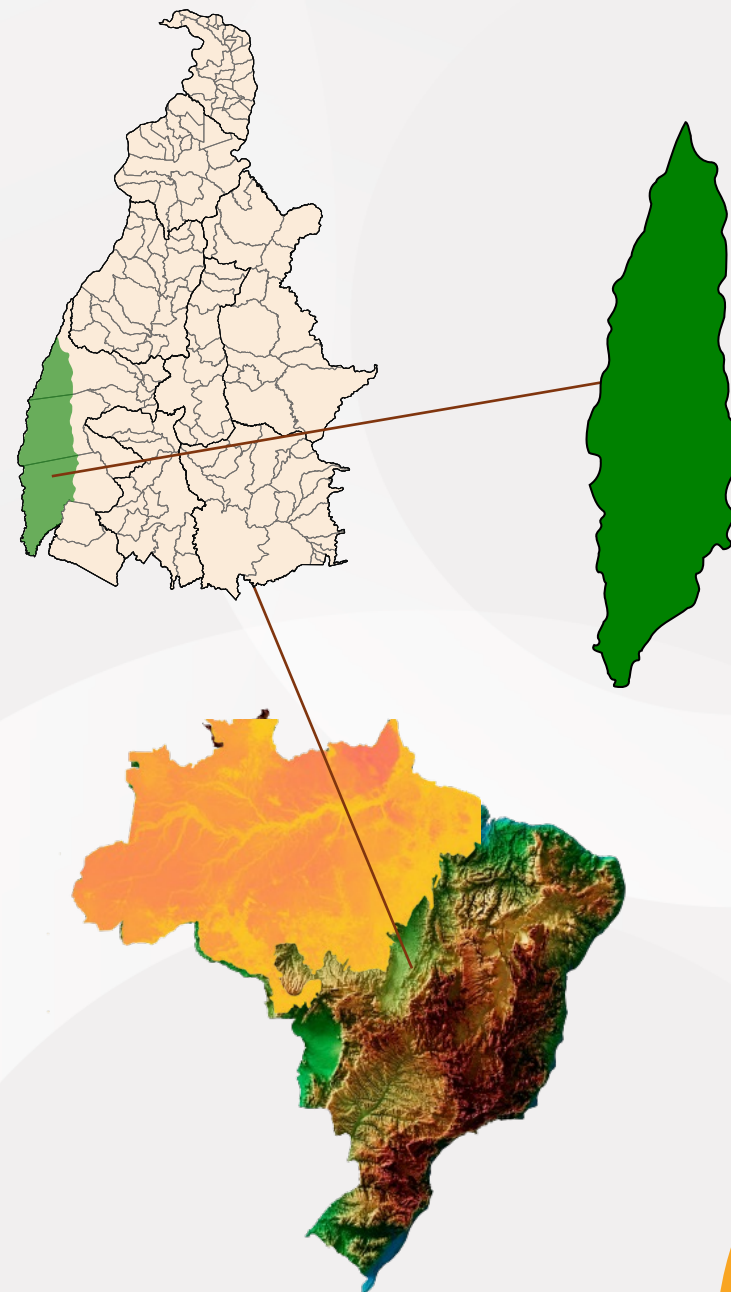
Embrace Araguaia

Embrace Araguaia

Location: Ilha do Bananal

Project under development focused on expanding territorial surveillance and strengthening local fire brigades.

Ilha do Bananal is one of the most sensitive regions to fire expansion in the Amazon–Cerrado transition zone, home to unique biodiversity and traditional communities.



Fire History (2020–2024):

- Average burned area: ~10,200 ha/year
- Prevfogo maintains permanent brigades on the island in partnership with Naturatins and local communities, but the vast territory and severe dry seasons make fire response a continuous logistical and climatic challenge.

Project:

- **Phase 1 (2025):** Implementation of the Pantera Digital system for risk mapping, burn scar analysis, and operational support for local brigades and Prevfogo teams.
- **Phase 2 (2026–2027):** Installation of 10 Pantera towers connected to community bases and Ibama/Prevfogo posts, covering the entire Ilha do Bananal and part of the Cantão State Park, enhancing early detection and rapid response capacity.

Investment and Financial Structure (36 months):

Item	Quantity / Period	Unit Value (R\$)	Total (R\$)
Tower setup	10 towers (one-time)	150,000	1,500,000
Operations (MRR)	10 towers × 36 months	12,000/month	4,320,000
Training and equipment	3 annual cycles (20 firefighters per cycle)	60,000/year	180,000
Estimated total (36 months)	—	—	≈ R\$ 6,000,000

Expansion Potential:

- Physical and digital surveillance coverage of 1.2 million hectares (63% of Ilha do Bananal).
- Expanded monitoring of wetlands, Indigenous territories, and ecological corridors.

Expected Impact:

- 50% reduction in the average annual burned area (10,200 → <5,000 ha).
- Potential avoidance of 500,000 tCO₂/year in associated emissions.
- Direct protection of 1.2 million hectares.
- Training of 60 firefighters over three years.
- Real-time alerts and strengthened territorial governance.
- Preservation of the traditional livelihoods of the Iny, Javaé, and Avá-Canoeiro peoples.



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Recognition and Legacy

Embrace the Forest is nationally and internationally recognized for its concrete results and for integrating technology, science, and traditional community knowledge.

Between 2022 and 2025, the program received multiple awards, certifications, and mentions from globally relevant institutions, establishing itself as a reference in **socio-environmental innovation and integrated fire management**.

Certifications & Awards

2021

CBI Green Bond – Forest Criteria

First green bond in Brazil certified by the Climate Bonds Initiative under the Forest Criteria, validating the project's climate integrity and positive impact on forests.



2022

Certified B Corporation

International recognition for meeting the highest standards of sustainability, governance, and positive social impact.



2023

Top Innovator – WEF UpLink

The Embrace the Forest project was recognized by the World Economic Forum as one of the leading global innovations in climate and biodiversity.



2023

EY Impact Entrepreneur of the Year

Award granted to Osmar Bambini and Eimi Arikawa for their entrepreneurial leadership and measurable impact in combating climate change.



2024

AI for Good – Best Environmental Impact Award

Recognition from the International Telecommunication Union (United Nations) for the "Embrace the Forest" project, awarded for its positive environmental impact through the use of artificial intelligence.

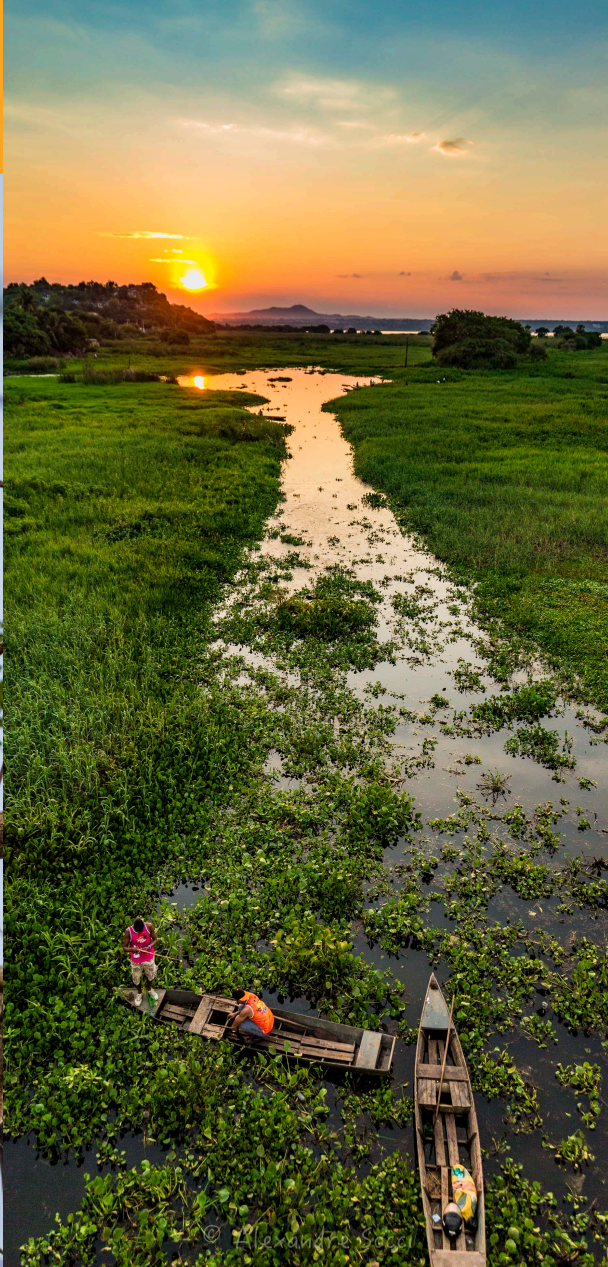


2025

MWCapital Horizon Awards

Global recognition at Mobile World Capital Barcelona, where the Embrace the Forest project was highlighted for aligning technology and innovation with the UN Sustainable Development Goals (SDGs).





Commitment to Climate and Territories

Embrace the Forest operates across five Brazilian biomes, uniting technology, science, and community participation to confront the impacts of climate change. Its actions contribute to **reducing CO₂ emissions, protecting biodiversity, and strengthening territorial governance.**

From local to global, what begins in the Brazilian forest resonates as an example of climate action and socio-environmental innovation.



Partnerships that Create Value

The success of Embrace the Forest stems from collaboration among public, private, scientific, and community sectors.

In each new territory, the program integrates institutions, companies, foundations, and local peoples into a shared network of positive impact.

**Each partnership
reinforces environmental
governance, expands
technological reach, and
transforms results into
collective legacy.**



Scalability and Ongoing Impact

The operational model created in the **Pantanal** and expanded to the **Amazon and Cerrado** demonstrates that territorial and technological solutions can grow efficiently while maintaining measurable results.

In the coming years, **Embrace the Forest** plans to integrate new **Pantera towers**, expand digital monitoring, and strengthen **community-based wildfire response**.

The impact is cumulative: each monitored hectare represents emissions avoided, lives protected, and territories made more resilient.

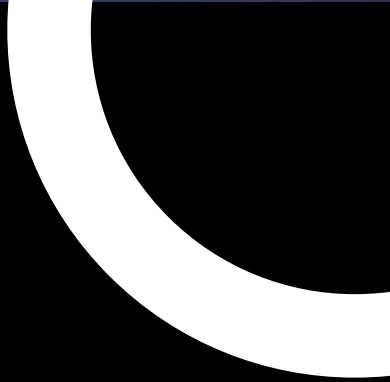
Embrace the Future with Us

Every protected forest is a living story that continues.

And every partner who joins this journey helps transform technology into care, data into decisions, and purpose into real impact.

Embrace the Forest represents a new model of collaboration, where companies, communities, and science walk side by side to ensure that Brazil remains a global leader in environmental preservation and innovation.

Joining means adding strength to a legacy that crosses borders, the legacy of a more balanced, resilient, and humane planet.



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