



**Combining carbon sequestration, forest  
regeneration and forest protection in  
Latin America**



We plant pioneer tree species **supporting local ecosystems** aiming at regenerating natural forests. Through robust labor and training programs we improve the lives of the communities where we operate in.



**We protect forests** from degradation and deforestation and promote biodiversity corridors.



**We offer certified carbon sequestration programs for carbon credits, REDD+ programs** (Reduced Emissions from Degradation and Deforestation), tailor-made nature based products for reducing and removing carbon emissions, and links between government, communities, organizations and carbon credit programs.

PROYECTO

BOSQUES

REGENERATIVOS

DE VICHADA



**The proposed project:** Carbon sequestration and forest regeneration in Vichada Colombia

PROYECTO  
**BOSQUES  
REGENERATIVOS**  
DE VICHADA

● CURRENT SITUATION ●



Extensive cattle ranching



Tree logging



Deforestation due to expansive agriculture and cattle ranching



Degraded poor soil



- **Protect 15.000 hectares of native forests and planting 50.000 hectares of regenerative forests in degraded soils of Vichada**

- Plant 50.000 hs of pioneer fast growing species
- Promote natural regeneration of forests
- Option to plant native species as succession of pioneer species thinning
- Conservation of native forests in the surroundings of the plantation.
- CO<sub>2</sub> removals through enhanced biomass pools

PROYECTO

**BOSQUES  
REGENERATIVOS**  
DE VICHADA

● THE PROJECT ●

**We look at reversing the  
worrying desertification in  
the region**



PROYECTO  
**BOSQUES  
REGENERATIVOS**  
DE VICHADA

● THE PROJECT ●



## VICHADA LOCATION

- **EASTERN COLOMBIA**
- 100,000 Square kilometres
- *Water availability!* One of the richest fresh water resource region in the world.
- Ideal for forestry plantations (ample sunlight and water)



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**Riparian Forests**  
 Forest areas on the banks of rivers



RÍO META

**Pioneer Plantation**  
 Fast growing

*Eucalypto pellita, & Eucalypto urophylla.*



**Enriched Forests|Improved Soil**  
 Biodiversity corridors



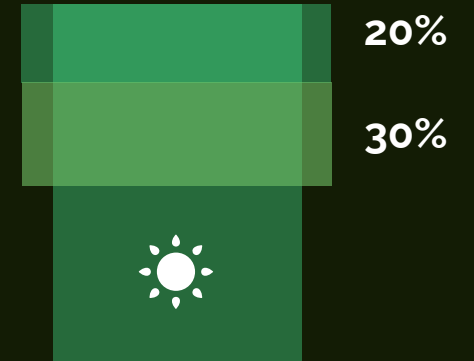
**Animal Transit Corridors**

RÍO ORINOCO

VICHADA

RÍO GUAVIARE

**Thinning and Native Species**  
 Reducing up to 100% of eucalyptus by stages to optimize carbon capture



**Low tillage**

Optimal use of fertilizers (mostly organic) aiming at improving the land long term.







Recently cut and  
burned area



Planting of  
seedlings



Typical Commercial  
Plantation



Enriched Regeneration



Dense Forest



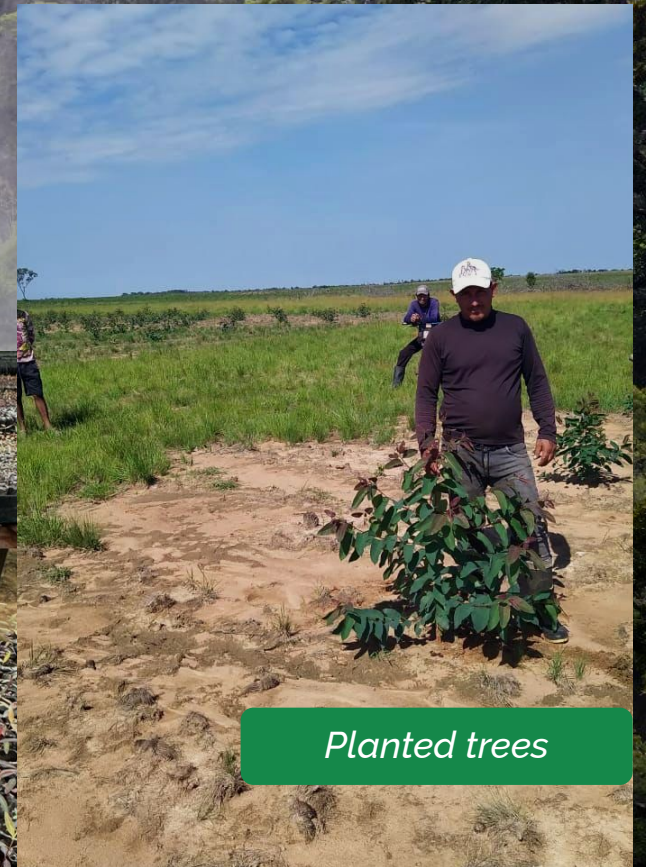
# CORE TO OUR MISSION

We strive to improve the lives of the communities where we operate

- Jobs and training for hundreds of families.
- Enhanced soils (better structure and nutrients)
- Increased pollination pools creates virtuous circle for green growth
- Moist retention in biomass and soils
- Carbon fixation
- Substantial reduction of deforestation



Seedlings

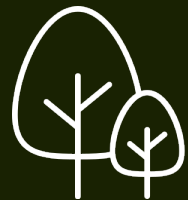


Planted trees



## Go Zero Go Green: an ideal local partner

We have more than 12 years operating in the region, developing various projects including forest plantation: cashews, eucalyptus, acacia, and native species.



Eucalyptus



Rubber



Cashews



Native Species

# WE HAVE THE EXPERIENCE & capacity to execute large scale



- ▶ **Forestry company with capacity to plant 5.000 ha/year**

We have planted over 10.000 has. in Vichada, with sales of VERRA credits

- ▶ **We have developed carbon projects reducing over 20 million tons of CO<sub>2</sub>, under ICROA accredited standards (BCR, CERCARBONO and VERRA)**



# WHAT WE OFFER

## Vichada Forest Regeneration Project



- Certified carbon credits
- Local presence and knowledge
- Ongoing regeneration pilot project of 500 has
- 50.000 ha land composed of several nearby farms

# Planting an average of **5000 hectares a year**

- We have identified the **ideal trees to to optimize removal of carbon emissions and to regenerate natural forests** (*ie, fast growing pioneer species Eucalyptus pellita, and Eucalyptus urophylla*)
- Pioneer non native species to regenerate natural forests in the region (a novel concept **endorsed by Conservation International Colombia**)
- **Thinning to allow regeneration of native species and better biomass growth** optimizing tree occupation per area (competition for sun and nutrients)
- Option to replace 100% of foreign pioneer trees with native species



# OPTION A

*(Passive assisted regeneration)*

**3 thinning stages** (removing 500 trees/ha by year 10, 200 by year 15, and 300 by year 20)

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**24 years project**

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**Natural generation**  
accelerated in cleared areas



# OPTION B

*(Active regeneration with native planting)*

**3 thinning stages** (removing 500 trees/ha by year 10, 200 by year 15, and 300 by year 20)

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**30 years project**

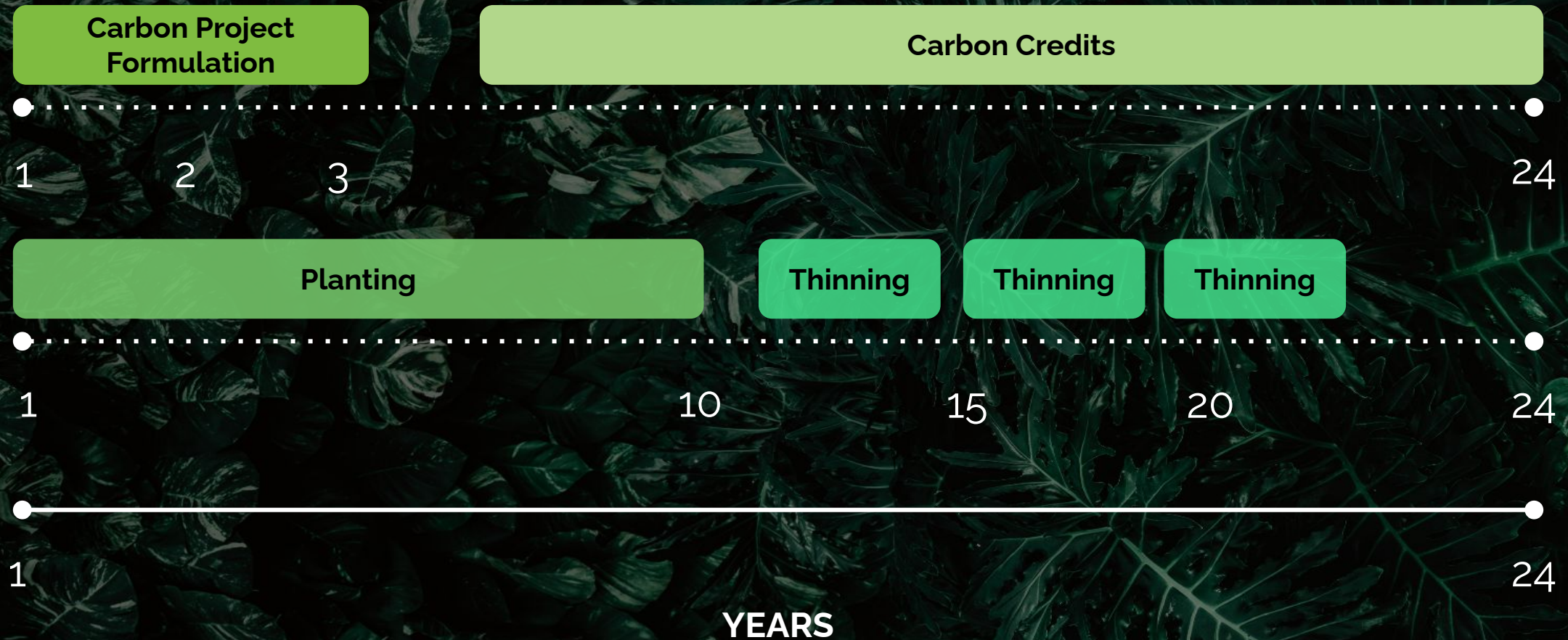
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**Planting native species** in cleared areas with two thinning stages (*50% of planted native trees by year 10*)

# OPTION A

## Horizon Investment •

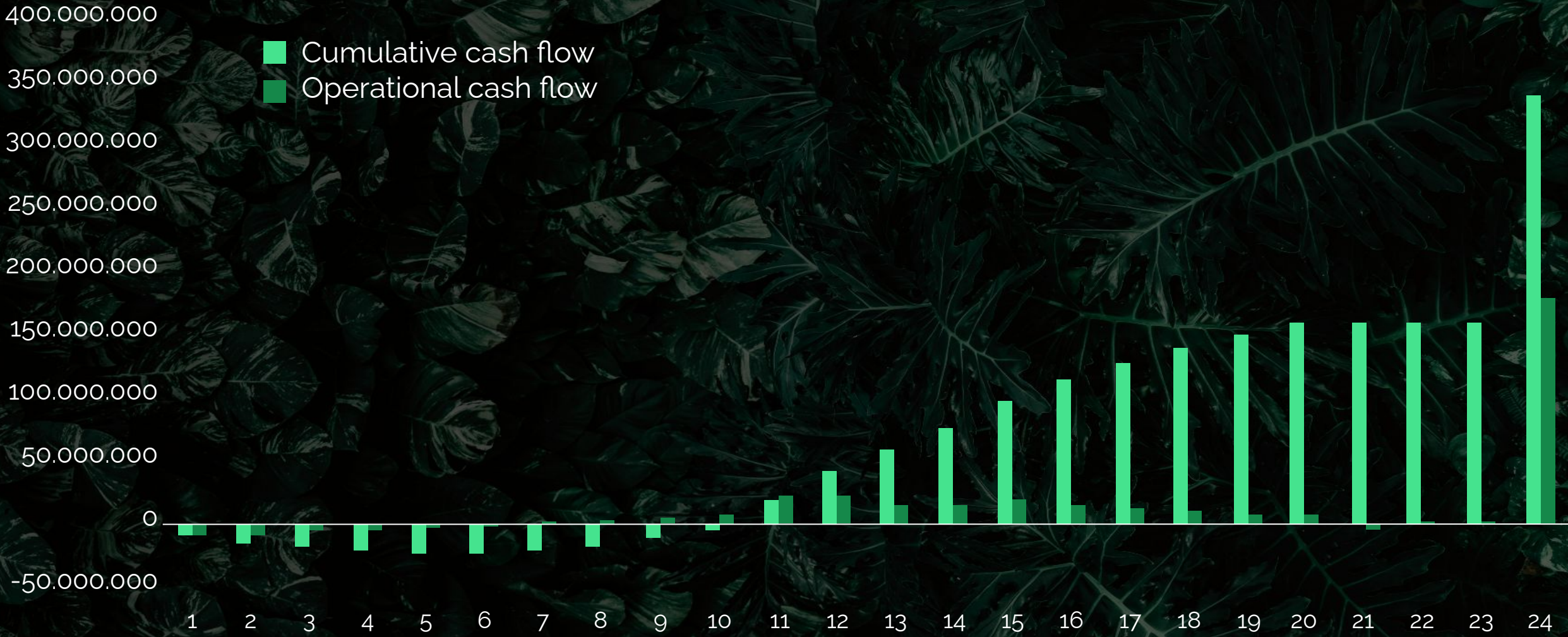
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# OPTION A

## Project cash flow (USD)



# OPTION A

## Financials •

### Financial Structure

- Carbon credit revenues
- Inter cycle harvest (thinning)
- Upside potential in biomass sales (posts and biochar)
- Upside potential revenues from thinning (posts and biochar)
- Costs of establishment
- Costs of carbon project

**9,5 million**  
of carbon offset certificates

**TIR** 22,6%

**VPN** USD 43,4 million

Investment

**USD 22,6 million**

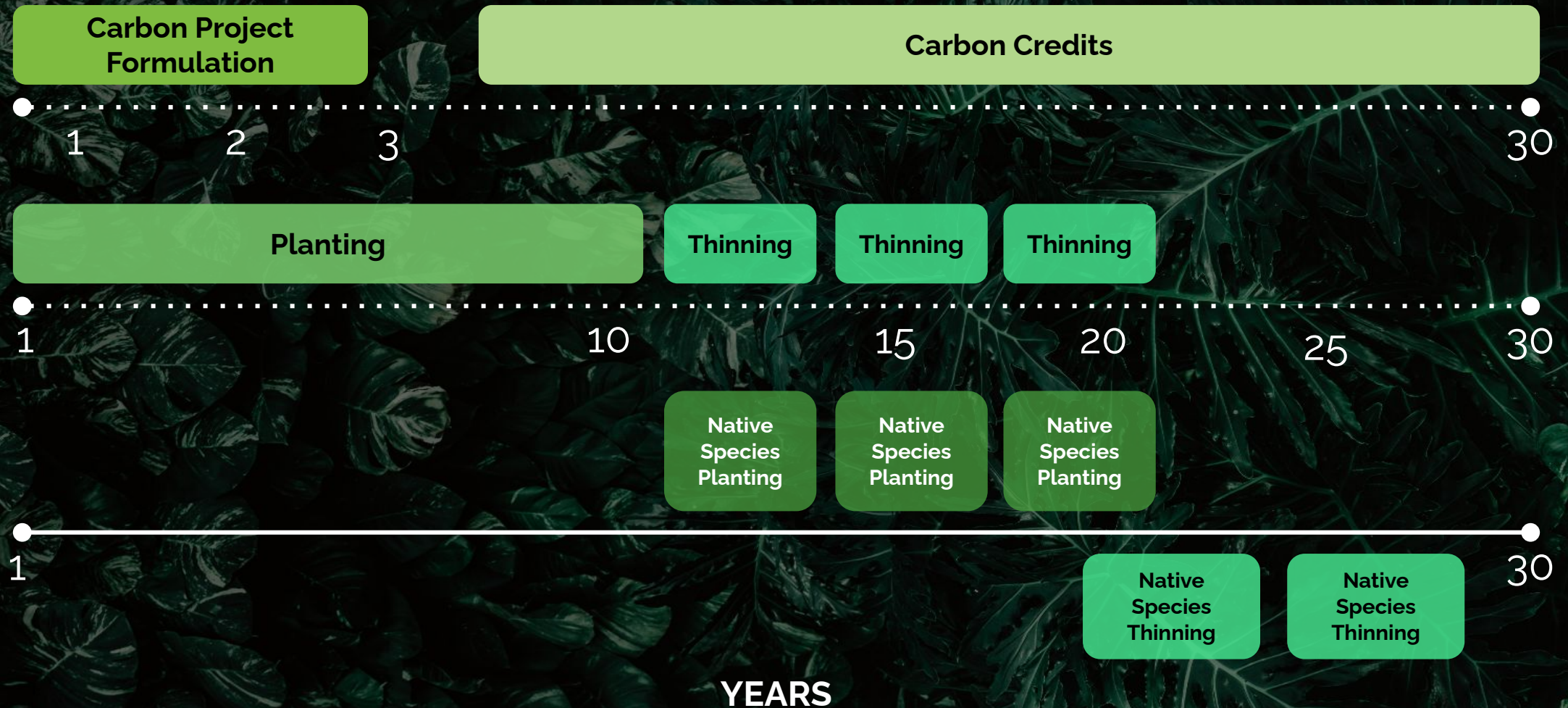
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11 year payback

# OPTION B

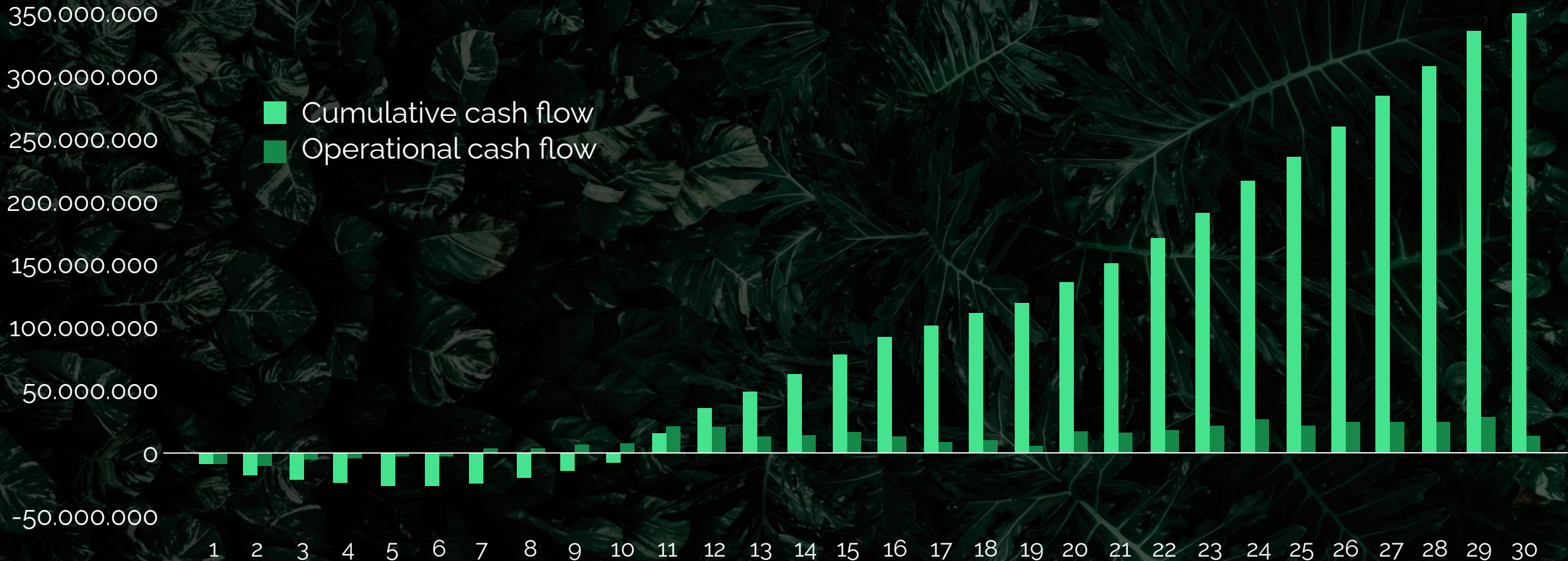
## Horizon Investment •

PROYECTO  
BOSQUES  
REGENERATIVOS  
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# OPTION B

## Project cash flow (USD)



# OPTION B

## Financials •

### Financial Structure

- Carbon Credit revenues
- Income from Inter cycle harvest (thinning) Upside potential in biomass sales (timber, posts and biochar)
- Costs of establishment
- Costs of native establishment
- Costs of thinning
- Costs of carbon project

**11,4 million**

of carbon offset certificates

**TIR**

16,5%

**VPN**

USD 3,9 million

Investment

**USD 24 million**

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14 year payback

The project can be scaled up to suit large CC nature based initiatives with over **20 million tons of verified credits on 100,000 available hectares**

Regeneration of native species

+ Biodiversity

+ Biomass

+ Improved soil



+ more than **100,000** available Ha.

PROYECTO

# BOSQUES REGENERATIVOS DE VICHADA



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# Annexes



- **Development of secondary forest from natural regeneration** (biomass enrichment) in the planting areas and in the cleared zones left after the thinning of 70%-100% of planted trees. Additional carbon credits from REDD+ projects to protect surrounding **riparian forests**.
- **Improvement of degraded soils** from the addition of organic fertilizers and moisture retention,, improved soil structures using biochar and mycorrhizae.
- **Carbon Credit Generation** through certified atmospheric CO<sub>2</sub> remotion in new trees and related biomass regeneration.
- **Option to replace 100%** of pioneer species with native species.



We have a highly experimented technical team that has consolidated their knowledge throughout the years.

The team has a profound understanding of the prevailing soil in the region, as well as the protocols of fertilization required for each type of soil and plant.

**This along with the necessary equipment and labor, enables us to successfully plant up to 5.000 hectares a year.**

# CAPACITY AND EXPERIENCE

## Forestry Operator •



### Technical Capacity:



Agro



Fertilizers



Nurseries

# EXPERIENCED CARBON Developer.



Development of carbon project for largest rubber plantation in Colombia



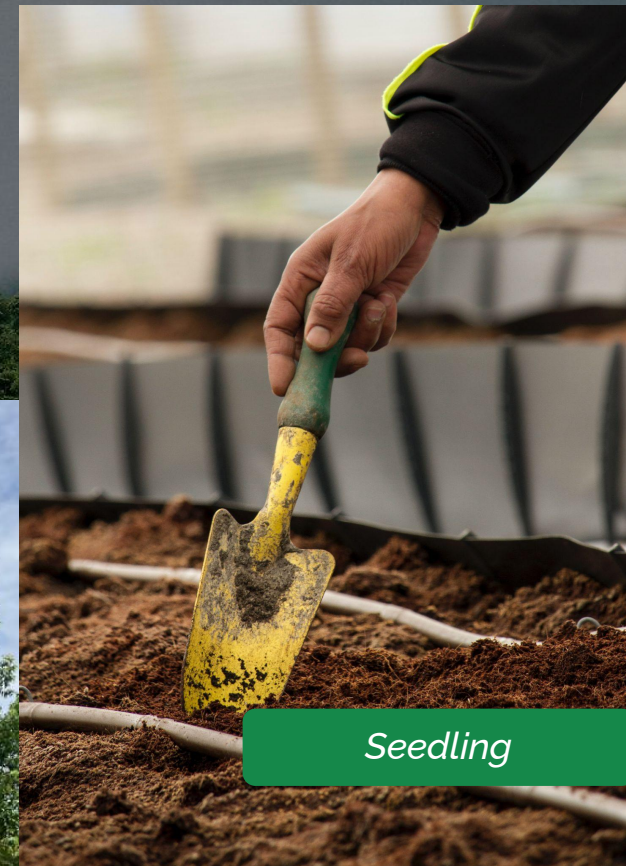
Development of various REDD+ projects in Colombia, already generating millions of carbon credits

# Key Variables •

- **Pioneer Species** tested as best option for region's soil and weather conditions (*Eucalyptus pellita* y *urophylla*). Optional Native (Cashews, Jacaranda, Anatto, Rubber)
- Duration: 24-30 years
- **Optimized planting** (first 10 years of plantation)
- Soil analysis and organic fertilization
- **Low tilling**
- Land availability (rent and/or invest) REDD+ in surrounding areas to **promote biodiversity corridors**



*Eucalipto pellita*



Seedling