

CARBON CREDIT PROJECT · REDD+

Standing forest as a financial asset

Feasibility, comparables, return estimates and a roadmap to monetize 7,686 ha of native Chaco forest — analysis material for the investor evaluating this acquisition.

7,686 ha

native forest · 7 km of frontage on the
Paraguay River

**US\$ 10–
30/ha/yr**

potential net income (base scenario)
· upside to ~US\$ 70–90

VCS 2611

Verra precedent in the same
department (Chaco PY)

THE THESIS ON ONE PAGE

Yes, it's viable — but as an **upside option**, not as immediate income.

This property's forest is exactly the type of asset a REDD+ project certifies: **standing** native forest, on an **active and legal** clearing frontier, with a registered precedent 140 km away. That combination underpins **additionality**, the market's hardest requirement.

~US\$ 25/ha/yr

NET to the operator in the **mid** scenario (via developer). ≈ US\$ 192,000/yr over 7,686 ha.

3–5 years

from start to the first issued credits. Carbon is medium-term upside, not immediate cash flow.

2 pathways

The **APD** pathway (avoid planned clearing) starts **now**; the **AUD** pathway waits for PY's jurisdictional data (~2027).

Three hard brakes — all verified

- ◆ **1 · The "2027 brake" applies to only ONE of the two pathways.** The **unplanned** deforestation pathway (AUD/VM0048) does wait for Paraguay's baseline (~2027). But the **avoided planned** deforestation pathway (APD/VM0007) —the one used by the neighboring projects that **already earn revenue**— is **open today** and does not depend on that data (see §Methodology).
- ◆ **2 · The generic credit sells below its cost.** Generic voluntary REDD+ US\$ 2.50–6/tCO₂e vs. production cost US\$ 6.70–15.20. Only the high-integrity segment (CCP) or Article 6 closes the equation.
- ◆ **3 · The scale (7,686 ha) is small** to amortize the fixed cost of certification (US\$ 150–400k). Successful comparables range from 32,000 to 188,000 ha → it requires a **partner developer / grouped project**.

Net figures, not headlines.

This report is designed so that you can **audit** the case: it always uses the **net** figure (not the gross), anchors every estimate to the nearest registered comparable, and tags each data point as **HARD** **MEDIUM** **ASSUMPTION**. Carbon is an **additional and verifiable** value thesis of this acquisition — quantified with explicit timelines and assumptions, not an inflated promise.

The advantage for the buyer: the property transfers "**carbon-ready**" —documented potential, clean title— and **without** the burden of an already-committed 30-year REDD obligation. The acquirer chooses the pathway, starts when they want and captures the **full upside**. Detail in §Pathways.

WHAT WE CERTIFY

7,686 ha of native forest, on the river and at the clearing frontier.

- ◆ **Area:** 7,686 ha · **Location:** 20 km south of Fuerte Olimpo, Alto Paraguay, Paraguay.
- ◆ **Coastline:** +7 km of frontage on the Paraguay River (border with Brazil) — river logistics and own water.
- ◆ **Homestead coordinate:** 21°11'36"S · 57°54'54"W
- ◆ **Bioceanic Corridor:** 55 km from the Carmelo Peralta–Porto Murtinho international bridge (under construction, physical connection Jul 2026).
- ◆ **Forest stratum:** transition from the Paraguay River's flood-prone subhumid forest ↔ dry Chaco. INFONA measured the flood-prone stratum at **146 tC/ha** — the highest in the country. **HARD**

Why this enables REDD+ (additionality): in the Chaco, licensed clearing is **legal for ~50–55%** of the property, and cattle ranching is at record prices. The alternative use "clear half and bring in cattle" is economically rational → the **deforestation threat is real and demonstrable**, which is exactly what Verra requires. Alto Paraguay lost 1.83 M ha; the Chaco concentrated 87% of land-use change 2022–24.



Schematic location. The property borders the Paraguay River (BR border) and sits between Fuerte Olimpo and the new Bioceanic Corridor bridge.

Forest carbon density — the physical basis of the credit

tC / ha (pool committed in a clearing)

Aboveground 30–45

Roots

≈ creditable

+ Soil 50–70 tC/ha (mostly NOT credited in REDD)

Result: ≈ 140–190 tCO₂e/ha committed — matches the ~130 of VCS 2611.



Palm groves and flood-prone forest — the country's highest carbon-density stratum.

ASSUMPTION Global datasets underestimate the Chaco by up to 14x. A real PDD requires a **local forest inventory** (plots), not global layers — it's the #1 gap to close.

THE MECHANISM

REDD+: getting paid for **not** clearing.

A carbon credit = 1 tonne of CO₂ that was not emitted into the atmosphere. In a REDD+ project, it is demonstrated that the forest **would have been felled** and the owner is paid to conserve it. Each avoided tonne, verified by an auditor and registered with Verra, becomes a sellable credit.



Why this property qualifies — and many don't

VERRA REQUIREMENT	THE PROPERTY	STATUS
Standing native forest (not degraded pasture)	Dense Chaco dry forest, 146 tC/ha in the riverside stratum	YES
Additionality — real deforestation threat	Active clearing frontier; legal and profitable clearing	STRONG
Precedent / proven methodology in the area	VCS 2611 and VCS 3671 in the same Chaco biome	YES
Clear title to the carbon	Ley 7190/23: landowner = owner of the credits	YES
Jurisdictional baseline available (VM0048)	Paraguay still in "AD Collection" — Verra publishes it ~2027	PENDING
Scale to amortize fixed cost	7,686 ha is small → requires grouped project	VIA DEV

REDD ≠ ARR. The nearest neighbor (Investancia, VCS 2496, ~20–25 km away) is a **reforestation** project (ARR) because its land was degraded. Our property, with intact native forest, is a **REDD** case — more valuable: it conserves an already-existing carbon stock, rather than creating it from scratch.

IT'S NOT THEORY — IT'S ALREADY BEEN DONE NEXT DOOR

Corazón Verde del Chaco — Verra VCS 2611.

The reference project: same department-region, same forest, same logic. Registered and issuing credits. It's the proof that the model works in the Paraguayan Chaco.

Developer	Quadriz Paraguay S.A. (Investancia group) + landowner Atenil S.A.
Methodology	VM0007 REDD — avoided deforestation
Registered area	31,858 ha (grouped project, target 200,000+ ha)
Crediting period	2020–2050 (30 years)
Estimated emissions	1,272,472 tCO ₂ e/yr (registry) · ~560,000 (marketing, net)
Density cited by Verra	≈ 130 tCO ₂ e/ha
Registered	21/03/2023 · First credits Jun 2023 · VVB Aster Global
Co-benefits	CCB Standard with Gold Level Distinction (biodiversity)

HARD Data extracted from Verra's official registry (API) + verra.org/case-studies. Registered location: Presidente Hayes, ~140 km SW of the property.

The full map — carbon in the Paraguayan Chaco

PROJECT	TYPE	AREA (HA)	DEVELOPER	STATUS · DISTANCE
Corazón Verde (VCS 2611)	REDD	31,858	Quadriz + Atenil	Issuing · ~140 km
Chaco Vivo (VCS 3671)	REDD	187,916	Creative Carbon + Atenil	In validation · the largest in PY
Investancia (VCS 2496)	ARR	120,000	Investancia + Ostrya	Registered · ~20–25 km (neighbor)
Panambi REDD+ (VCS 4744)	REDD	TBD	EcoSecurities	Validation (VM0048) · 2026
Neem Reforestation (VCS 2744)	ARR	7,000	El Retiro S.A.	Issuing · Boquerón

Key takeaway: the dominant model is **developer + landowner**. Atenil (a single landowner) did **two** projects with **two** different developers. It's exactly the replicable pattern for this property. Paraguay has already recorded sales exceeding **US\$ 10 M** and has **>400,000 ha** in active certification **MEDIUM**.

TWO TECHNICAL PATHWAYS, NOT ONE

APD, open today · AUD, waiting for 2027.

This is the nuance that defines the project's timing. Verra has two REDD activities to avoid clearing, and for Paraguay **one is available now and the other blocked until ~2027**. The neighboring projects that already earn revenue use the one that is open.

PATHWAY	WHAT IT IS	STATUS IN PARAGUAY (JUL 2026)
APD VM0007	Avoided planned deforestation. The owner has the documented right and intention to clear, and chooses not to do it.	OPEN TODAY. It does not depend on the jurisdictional baseline. It's the one used by Corazón Verde (VCS 2611) and Chaco Vivo — already registered and issuing.
AUD VM0048	Avoided unplanned deforestation. Forest is protected against a diffuse frontier/third-party threat.	BLOCKED ~2027. Verra sets the baseline by country and Paraguay appears as "AD Collection / TBD". The old pathway (VM0015) closed in Mar 2025.

The consequence: Manuela **does not have to wait for 2027**. It can go via **APD/VM0007 now**, ideally joining as a new instance of an already-running grouped project (Corazón Verde del Chaco is the natural candidate). Realistic timeline to first credit: **2.5–4 years**.

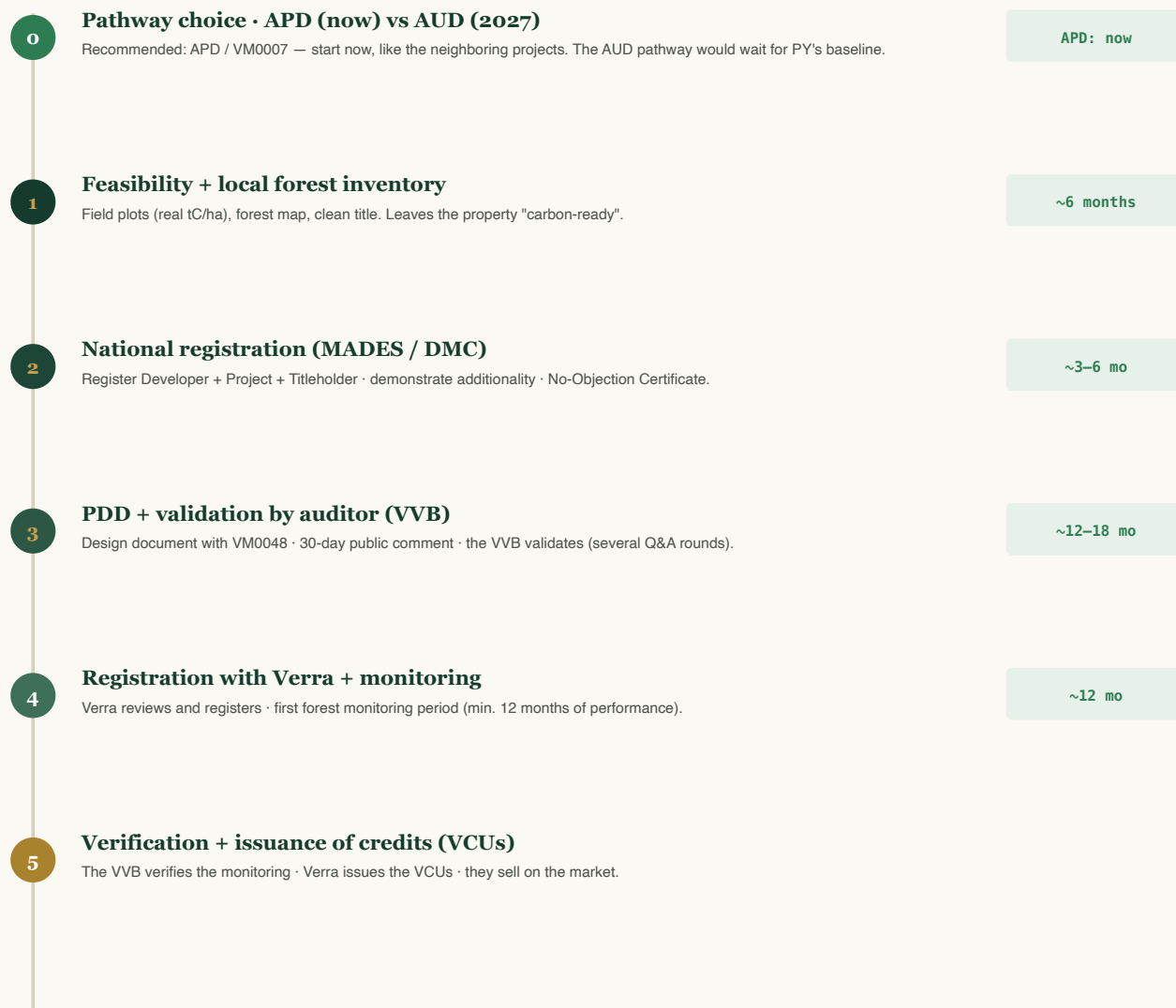
⚠ **The APD pathway requirement:** document **legal right + credible intention to clear** (clean title + INFONA/MADES land-use change permit). It's what the neighbors do. There is a narrative tension with the name "Reserva Forestal", but the credit pays precisely for **choosing not to execute** that legal clearing.

Integrity and price: after the 2023 crisis (investigations into overestimation of REDD credits), Verra tightened its methodologies. Quality APD credits —with CCB, a good rating and, above all, authorized via **Article 6 with Singapore (US\$ 27–43)**— sustain premium pricing; generic unrated ones stay at US\$ 2–6. **HARD**

EUDR — tailwind. From 30/12/2026 the EU bans imports of beef/soy/timber from land deforested after 2020. 67% of Paraguayan beef comes from the Chaco → keeping the forest standing **raises the economic value** of the woodland and directly reinforces the REDD+ case. **HARD**

FROM LAND TO CREDIT · 3 TO 5 YEARS

The process, in six clear stages.



First revenue. 1st \$\$ ⇄ Recurring cycle Monitoring + periodic verification → annual issuances during the crediting period (up to 30 years).

Realistic total start → first credits: 2.5 to 5 years (via the APD pathway, low end of the range). Comparable Corazón Verde: start ~2019/2021 → first VCUs Jun 2023. **The developer** compresses this calendar because it already has the methodological map, the VVB and the contacts with MADES.

HOW MUCH IT COSTS AND WHAT IT SELLS FOR

The economics of the credit, no window dressing.

Cost to develop the project

ITEM	USD
PDD (design document)	30k–200k
Validation (VVB)	30k–100k
Verification (per cycle)	30k–50k
Monitoring (annual)	10k–50k
Verra fee per issued credit	0.23
Upfront to 1st issuance (~8,000 ha)	150k–400k

7,686 ha has worse per-ha economics than a mega-project: the fixed cost is almost the same. It reinforces the "grouped project" route.

Credit price today (2026)

SEGMENT	US\$/T
Generic voluntary REDD+	2.5–6
Cost to produce the credit	6.7–15.2
High integrity (CCB / well rated)	10–16
Article 6 · bilateral Singapore–PY	27–43

The uncomfortable fact: the **generic** credit (US\$ 3–6) sells **below** what it costs to produce it (US\$ 7–15). Only by reaching high integrity or Art. 6 is the project profitable. That's why VM0048 (CCP) matters and why a developer that sells to the premium segment is advisable.

Three business models

MODEL	HOW IT WORKS	FOR THE INVESTOR
DIY (in-house)	The investor puts up US\$ 150–400k, hires a VVB, registers and sells	~85–90% of the gross, but all the risk and capital · not recommended at this scale
Partner developer	The developer provides capital + VVB + marketing; the investor contributes the land	~35–45% of the revenue, zero upfront, zero risk ✓ recommended
Carbon streaming	A third party advances capital for the right to buy future credits at a fixed price	Early liquidity, gives up price upside

ASSUMPTION The developer/owner split has no standard public %; ~40% to the owner is a modeling calibration (references: Arbonics, Wildlife Works Kasigau). Request real term-sheets from Quadriz / Creative Carbon / EcoSecurities.

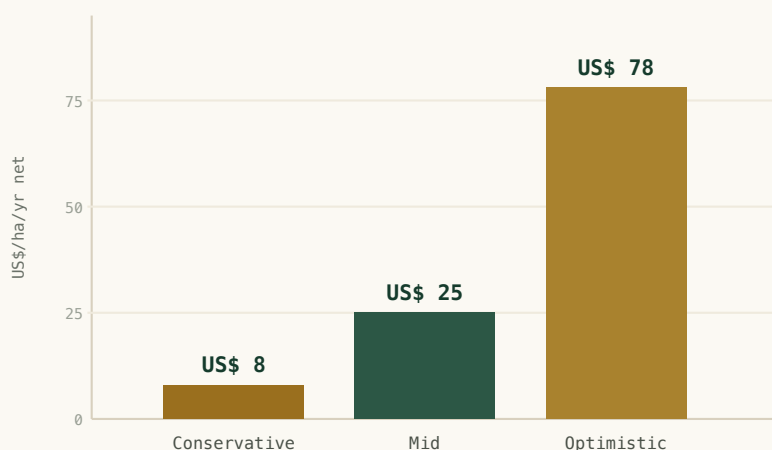
THE NUMBERS, OVER 7,686 HECTARES

How much it could generate — three scenarios.

Anchored to the performance of the comparable Corazón Verde (~17.5 tCO₂e/ha/yr net under the old methodology) and adjusted for the VM0048 haircut. All revenues are **modeling estimates** **ASSUMPTION**; prices and the comparable anchor are **HARD**.

SCENARIO	TCO ₂ E/HA/YR	VOLUME/YR	PRICE	GROSS/YR	GROSS/HA
Conservative	5	38,430	US\$ 4	US\$ 153,720	~20
Mid	9	69,174	US\$ 7	US\$ 484,218	~63
Optimistic	14	107,604	US\$ 14	US\$ 1,506,456	~196

The return for the operator — NET, via developer



US\$ 192k/yr

to the operator in the **mid** scenario (~US\$ 25/ha) over 7,686 ha

Conservative ~US\$ 61,000/yr

Mid ~US\$ 192,000/yr

Optimistic ~US\$ 600,000/yr

Conservative cross-check: a more cautious independent verification estimates volume at 15,000–40,000 credits/yr and the **net to the owner at ~US\$ 60,000–100,000/yr** (mid case, developer split 50–70%). That's why the site headline uses the **base range US\$ 10–30/ha/yr**, which both models support — never the optimistic ceiling alone.

In summary for the investor:

Potential income from carbon credits (REDD+, via APD): **~US\$ 10–30/ha/yr net** in the base scenario, with upside to **~US\$ 70–90** in high integrity / Article 6 (bilateral with Singapore). Pathway available **today**; first credits in 2.5–4 years; registered precedent in the same biome (Corazón Verde del Chaco, Verra VCS 2611). Zero capital and zero risk via the developer route.

PARAGUAY ALREADY HAS ITS LAW – AND IT PLAYS IN YOUR FAVOR

Ley 7190/2023 + Decreto 3369/2025.

Paraguay is among the first countries in the region with a complete carbon credit framework.

The essential point: **the landowner is the owner of the credits**. The State does not keep equity — it only charges a fee.

- ◆ **Title:** the owner of the property (or forestry surface-right holder) is the titleholder of the credits. It is NOT the State.

HARD

- ◆ **Authority:** MADES, via the new Directorate of Carbon Markets (DMC). It administers the registry, approves methodologies (Verra is eligible) and issues the No-Objection Certificate.

- ◆ **Withholding:** from 3% to 10% of the credits — it **only** applies to international transfers (ITMO / Article 6). Sales to the voluntary market **pay no** withholding.

- ◆ **Tax benefits:** credit transfers **exempt from VAT**. Requirement of ≥50% Paraguayan labor.

- ◆ **State cost = fee (charges), not equity:** Developer 300 day-wages · Project 150 · No-Objection 300. The State does not take a share of the credits.

Voluntary vs Article 6 — the decision:

Voluntary VCU (Verra): no withholding, light national process, voluntary market price.

ITMO (Art. 6): compliance-grade price (US\$ 20+), but 3–10% withholding + Letter of Authorization + more scrutiny. Paraguay has already signed a bilateral with **Singapore** (May 2025).

National checklist before Verra:

- ◆ Prove title
- ◆ Register Developer + Project
- ◆ Demonstrate additionality
- ◆ Methodology approved by MADES
- ◆ No-Objection Certificate (anti double-counting)

YOUR OPTIONS ONCE THE PROPERTY IS ACQUIRED

Three ways to monetize the carbon — and the recommended one.

OPTION A

Do it alone (DIY)

You put up the capital and assume all the development risk.

+ Retain ~85–90% of the gross.

– US\$ 150–400k upfront, 3–5 years with no income, total risk, scale too small to amortize the fixed cost.

✗ Not recommended at this scale

OPTION B

Partner developer (JV)

Joint venture with an active Chaco developer (Quadriz, Creative Carbon, EcoSecurities).

+ Zero capital and zero risk for you; the dev already has the method, VVB and MADES contacts; fast start; ~35–45% of the revenue.

– Gives up the majority of the credits; 30-year permanence over the committed forest.

✓✓ Recommended

OPTION C

Carbon streaming

A carbon investor advances capital in exchange for the right to buy the future credits at a fixed price.

+ Early liquidity — get paid today against credits issued years later.

– Gives up the price upside if the credit rises.

✓ If you prioritize early liquidity

The recommendation for the acquirer

Option B (partner developer): monetize the standing forest with **zero capital and zero risk**, leaning on a developer that already has the proven method in the Chaco. And since the **APD pathway is already open** — no need to wait for the 2027 jurisdictional data —, the project **can start immediately** after purchase. Option A only works at large scale; C is advisable if you prioritize early liquidity over upside.

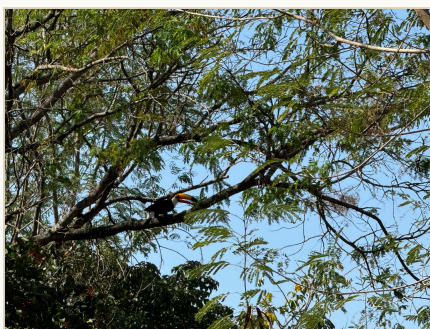
Why buying now has an advantage: the property arrives **with no REDD commitment taken on** — it inherits neither a 30-year contract nor an already-signed split. You choose the pathway, the developer and the timing, and retain 100% of the upside you decide to capture. The seller leaves the asset **"carbon-ready"**: clean title, documented potential and the neighboring precedent already operating.

WHAT IS CONSERVED

An ecosystem worth more standing.



Paraguay River and water hyacinths — 7 km of coastline



Toucan — biodiversity (CCB co-benefit)



Capybara — abundant wildlife



Standing Chaco dry forest — the carbon stock



Marsh deer



Dock on the Yacaré stream



Bioceanic Corridor international bridge under construction (Jun 2026) — 55 km away. The driver of capital appreciation.

The full case for the asset extends beyond carbon: 7,686 ha with serious infrastructure (stone house, 1,380 m airstrip, American-style corral, 1,420 ha of paddocks), on the Bioceanic Corridor and the river. Carbon is **one** of four value theses — alongside real estate, ranching and tourism.

This report covers exclusively the **carbon credit** dimension. The full photo and video material, plans and documentation are available in the data room for interested parties.

FULL TRANSPARENCY

What is hard data and what is assumption.

Hard data (verified primary source)

- ✓ VCS 2611: 31,858 ha, VM0007, registered 21/03/2023 (Verra registry via API)
- ✓ VM0048/VMD0055 active + ICVCM's CCP; Paraguay = "TBD" (~2027)
- ✓ Transition VM0007→VM0048 ≈ -40% credits (Calyx Global)
- ✓ 2026 prices: generic 2.5–6 · high integrity 10–16 · Art. 6 20–22+
- ✓ Chaco carbon density: 30–45 tC/ha aboveground, 146 tC/ha flood-prone (INFONA)
- ✓ Ley 7190/23 + Decreto 3369/25; landowner = owner of credits
- ✓ EUDR large operators 30/12/2026, cutoff 2020

Assumptions and gaps to close

- ◆ **Yield** 5/9/14 tCO₂e/ha/yr — anchored to the comparable, adjusted for VM0048. The real one is set by Verra ~2027.
- ◆ **Split** developer/owner ~40% — there is no public standard.
- ◆ **Local forest inventory** pending (global ones underestimate the Chaco 14x).
- ◆ **Exact risk band** of the microzone (comes with the PY map).
- ◆ **Real term-sheets** from developers (Quadriz / Creative Carbon / EcoSecurities).

Notice. This document is a preliminary feasibility analysis for informational purposes for parties interested in acquiring the property. It does not constitute financial, legal or environmental advice, nor an offer of carbon credits. The income figures are modeling estimates subject to certification, market price and regulation. Before committing numbers in a real PDD, the five listed gaps must be closed.

Primary sources: registry.verra.org (API VCS 2611) · verra.org (VM0048, VMD0055, jurisdictional table, fee schedule) · icvcm.org · Calyx Global · Ecosystem Marketplace SOVCM 2025 · Abatable · World Bank State & Trends 2026 · Sylvera · ENGIE SEM (CORSIA) · INFONA IFN 2026 · Gasparri & Pötzschner (Chaco carbon) · Ley 7190/2023 (silpy.congreso.gov.py) · Decreto 3369/2025 (decretos.presidencia.gov.py) · Ferrere · Vouga · mti.gov.sg (Singapore bilateral) · EU Access2Markets (EUDR) · Quadriz · Creative Carbon · EcoSecurities. Full report with URLs: VERRA-CARBON0.md.