



Karbon Token Whitepaper

The Only Bags That Offset

v1.3 – 2025

1. Introduction

Climate change is one of the greatest challenges facing humanity. The voluntary carbon market has emerged as a tool to mitigate emissions, but existing systems are often opaque, expensive, and difficult for communities to engage with.

Karbon Token (\$KARBON) bridges traditional carbon offset markets with the transparency and accessibility of blockchain. Built on the Kaspa network, \$KARBON provides a fixed-supply, community-driven currency tied to verifiable carbon sequestration. Businesses can retire offsets through a transparent burn process while individuals can participate in a culture-driven ecosystem.

Karbon Token blends serious carbon integrity with Web3 culture, making offsets both credible and engaging.

2. Vision & Mission

Vision:

To create a transparent, verifiable, and accessible carbon offset marketplace powered by blockchain and rooted in Indigenous stewardship.

Mission:

- Restore ecosystems and biodiversity using Traditional Ecological Knowledge (TEK) and modern science.
- Provide businesses with audit-ready carbon certificates.
- Create a community economy around real-world impact.
- Return land stewardship and climate benefits to local and tribal communities.

3. Governance

Karbon Token is managed and operated by Iron Frog Crypto LLC. The entity is responsible for:

- Treasury oversight
- Offset acquisition and verification
- Annual issuance of offset tokens
- Certificate issuance and registry management

Karbon is grounded in a legal framework to ensure stability, accountability, and transparency.

4. Founder

Toby Vanlandingham

Founder, Karbon Token · Yurok Tribal Councilmember (2017–Present)

Toby Vanlandingham is the founder of Karbon Token and a Yurok Tribal Councilmember since 2017, where he has overseen the Yurok Tribe's nationally respected forest carbon offset program. This work has given him deep experience in program oversight, verification standards, and using carbon finance to fund ecological restoration and community benefit.

He also brings a strong background in Traditional Ecological Knowledge (TEK) and cultural restoration. As part of the Klamath River Local Organizing Committee, Toby helped reintroduce cultural fire to Yurok lands through a 2012 partnership with the Tribe and the California Endowment. This work is rooted in restoring balance, resilience, and biodiversity to ancestral lands.

In addition to governance and restoration, Toby is an OG member of the Nacho Creator Team, where he helped shape early Web3 community projects. This unique mix of tribal leadership, carbon markets, TEK practices, and Web3 culture drives his mission: to restore land, revive ecosystems, and create a transparent carbon marketplace for the future.

5. Tokenomics

\$KARBON (Currency Layer)

- Supply: 25,000,000 fixed (never minted again)
- Burnable: No
- Role: Base currency for acquiring offset tokens
- Unitization: 1 \$KARBON = 0.5 kg CO₂ capacity

Unitization is a counting standard, not a peg. Market price is determined by supply and demand.

Annual Vintages (Offset Layer)

- Examples: KARBON25, KARBON26, etc.
- Issued: Once per year, based on verified sequestration
- Burnable: Yes (burn = retire offsets + issue certificate)

- Supply Formula: Verified tons × 2,000 tokens
- Unit: 1 token = 0.5 kg CO₂

Special Issuances

- Issued: When bulk verified offset opportunities arise outside the annual cycle
- Labeling: Clearly marked (e.g., KARBON25-S1)
- Verification: Backed by real, audited carbon sequestration projects
- Burnable: Yes, generating certificates with unique IDs
- Purpose: Provides flexibility for Karbon to expand verified offset capacity throughout the year.

6. Genesis Project: Tulley Creek Watershed

The Genesis issuance of Karbon Token begins on a 16-acre parcel of forest in the Tulley Creek watershed, located inland on the Yurok Reservation in Northern California. This site marks the first step in connecting real-world land stewardship with blockchain transparency.

The property, logged in the 1950s and regrown over the decades, now serves as a model for ecological restoration through the combination of Traditional Ecological Knowledge (TEK) and modern carbon verification standards. It borders existing carbon project parcels managed by the Yurok Tribe, strengthening the integrity and scale of local carbon efforts.

Key details:

- Location: Tulley Creek Watershed, Yurok Reservation, Northern California
- Parcel Size: 16 acres of second-growth mixed conifer forest
- Estimated Sequestration: Approximately 100 tons of CO₂ per year
- Annual Vintage Mint: 200,000 KARBON25 tokens

Offset Assurance for Genesis Project

While the Tulley Creek Genesis Project is not yet a formally verified carbon project, its estimated 100 tons of annual sequestration are fully backed, one-for-one, by 100 tons of verified third-party carbon offsets sourced from recognized and accredited registries through Karbon's offset partners.

This structure guarantees that all Genesis-issued tokens correspond to real, verifiable climate impact from day one, while Karbon continues to develop and certify its own project portfolio under accepted verification methodologies.

The Tulley Creek project represents the foundation of Karbon Token's mission — restoring

balance to the land, advancing cultural stewardship, and creating a transparent, verifiable system for carbon offsets on the blockchain.

7. How It Works

Step 1: Acquire \$KARBON

- Swap KAS to \$KARBON on Zealous Swap (Kaspa DEX).
- \$KARBON is the permanent currency layer.

Step 2: Swap into Offset Tokens

- Exchange \$KARBON 1:1 for annual vintages (e.g., KARBON25) or special issuances.

Step 3: Burn to Retire CO₂

- Burn offset tokens to permanently retire the equivalent CO₂.
- Conversion: 2,000 tokens burned = 1 ton retired.

Step 4: Receive Certificate or Badge

- Businesses receive PDF and on-chain certificates showing tons retired, transaction hash, timestamp, and ID.
- Community members may receive digital badges for participation.

8. Certificates

When tokens are burned, Karbon issues a verifiable certificate:

- Tons of CO₂ retired
- Token burn transaction hash
- Timestamp
- Certificate ID

Certificates can be attached to ESG and impact reporting. A public registry of retired offsets will be maintained for transparency.

9. Roadmap

2025–2029: Genesis

- Launch \$KARBON and KARBON25 (200k supply = 100 tons)

- Issue first certificates
- Treasury purchases additional verified offsets

2030–2034: Expansion

- Onboard tribal and independent landowners
- Expand issuance to multi-million ton scale

2035–2039: Scaling

- Enterprise adoption
- Integration with ESG platforms

2040–2044: Global Reach

- International project onboarding
- Recognition as a standard for blockchain offsets

2045–2049: Maturity

- Full 25M \$KARBON in circulation
- Widespread adoption as a carbon currency

10. Market Position

Karbon Token stands apart by combining:

- Transparency: On-chain issuance, burns, and certificates
- Integrity: Backed by real-world sequestration
- Community: Participation and culture-driven engagement
- Governance: Operated by Iron Frog Crypto LLC for accountability

Unlike legacy offsets, Karbon offers both serious utility for businesses and engagement for communities.

Crypto and Climate Responsibility

The blockchain industry has transformed global finance and innovation, but it has also become one of the most energy-intensive sectors in the world. The growing computational power required for mining, validation, and transaction processing contributes significantly to greenhouse gas emissions.

As blockchain adoption accelerates, offsetting carbon emissions should be a top priority for those within the crypto ecosystem. Responsible projects and communities can take direct action by supporting verifiable, transparent offset programs that restore the planet while preserving decentralization and innovation.

Karbon Token provides a practical solution — a carbon-backed currency that allows Web3 participants to offset their environmental footprint directly on-chain. Whether through personal wallet activity, validator operations, or project emissions, holding and burning Karbon represents measurable, permanent climate impact.

By embedding environmental accountability into blockchain culture, Karbon aims to help crypto evolve into a net-positive force for the planet, balancing digital innovation with ecological responsibility.

Conclusion

Karbon Token is more than a carbon offset — it is a currency for climate action, rooted in Indigenous stewardship, transparent blockchain technology, and community participation.

By holding and burning Karbon, participants contribute to real-world sequestration, biodiversity restoration, and cultural renewal.

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