



GMGN

A solar-powered, low-energy token ecosystem for protecting the world's rainforests for the next 100 years.

Whitepaper, Version 2.0, October 2026. Robinhood Chain (Arbitrum-based Layer 2).

Contents

1. Executive Summary
2. The Problem: Forests, Paper and Digital Waste
3. Vision and Principles
4. Solar Energy as the Foundation
5. Detection and Ranger Response
6. Proof-of-Conservation
7. The Paper Reduction Program
8. Low-Energy Technology Architecture
9. Token Specification
10. Tokenomics and the Eco-Treasury
11. Governance
12. The Worldwide Ecosystem
13. The 100-Year Plan
14. Roadmap 2026 to 2028
15. Transparency, Metrics and Reporting
16. Risk Factors
17. Legal Disclaimer

Chapter 1

Executive Summary

GMGN is a community token that links a simple idea to a concrete mission: use clean solar energy and very low-energy blockchain infrastructure to help keep tropical rainforests standing, and do it in a way that can last a century rather than a market cycle.

Tropical primary forests store enormous amounts of carbon, regulate rainfall, and hold a large share of the planet's land-based biodiversity. Every year, large areas are lost to clearing for agriculture and cattle, to illegal logging, to mining, to infrastructure, and in some regions to plantations that feed the pulp and paper industry. Once primary forest is cut, it cannot be replaced on any human timescale.

GMGN proposes a three-part response:

- **Protect.** Deploy solar-powered "Green Canopy Nodes" that listen for chainsaws, engines and gunshots, and send alerts to local ranger units and indigenous guardian communities, who remain the ones that act on the ground.
- **Prove.** Record verified protection data through a Proof-of-Conservation process, anchored on a low-energy Layer-2 network, so that supporters can check what was done instead of trusting marketing.
- **Reduce demand.** Run a Paper Reduction Program that makes GMGN a digital-first ecosystem and encourages partners and holders to replace paper processes with digital ones, lowering pressure on forests that are cut for pulp.

All of this is funded by an Eco-Treasury of 15% of the token supply, governed by token holders through transparent on-chain voting, and operated on infrastructure whose energy use per transaction is a tiny fraction of that of legacy blockchains.

An honest framing. No project can guarantee that a forest will be protected for 100 years. What we can do is design for longevity: modular hardware that can be repaired and replaced, a treasury with spending rules that prevent it from being drained early, open data that anyone can audit, and local communities who hold real ownership of the outcome. This paper describes that design, and clearly separates what is a plan from what is already delivered.

Chapter 2

The Problem: Forests, Paper and Digital Waste

2.1 Why tropical rainforests matter

Tropical rainforests cover a small share of the Earth's surface but perform outsized work. They absorb and store carbon in trees and soils. They recycle moisture into the atmosphere, which feeds rainfall far beyond the forest itself, including agricultural regions thousands of kilometres away. They shelter a very large proportion of known land species, many of them found nowhere else. And they are home to indigenous peoples whose land stewardship has, in many studies, been associated with lower deforestation rates than comparable unprotected land.

Primary forest is not interchangeable with replanted forest. A mature canopy has a structure, soil biology and species network that took centuries to form. Replanting is valuable, but protecting what still stands is almost always cheaper, faster and more effective per hectare.

2.2 What actually drives deforestation

It is important to be accurate here, because credible conservation starts with correct diagnosis. The main drivers differ by region:

- **Cattle ranching and soy production** are among the largest drivers in the Amazon basin.
- **Palm oil, pulpwood and other plantations** are major drivers in parts of Southeast Asia.
- **Small-scale agriculture and charcoal** are significant in the Congo Basin.
- **Illegal and unsustainable logging, mining and road building** open access to forests everywhere and often make later clearing possible.

Paper and pulp are therefore one driver among several, not the only one, and their weight varies by region. GMGN does not claim that reducing paper alone would end deforestation. We claim that it is a real and addressable part of the picture, and that the most effective response combines on-the-ground protection with reduced demand.

2.3 The paper footprint

Paper production uses wood fibre, large amounts of water, and significant energy, and the sector is a major user of wood worldwide. A great deal of that wood comes from managed plantations and recycled fibre, and responsible certification schemes exist. Even so, administrative, contractual and packaging paper remains a large category of avoidable use. Contracts that are printed and mailed, receipts that are never read, forms that are scanned after being printed: much of this is habit, not necessity.

2.4 The hidden footprint of digital systems

Replacing paper with computers only helps if the digital alternative is itself efficient. Some blockchains consume as much electricity as small countries. A project that claims to protect nature while relying on energy-hungry infrastructure would undermine its own mission. For that reason, GMGN treats energy consumption as a core design constraint at every layer: the token network, the sensors, the data storage and our own websites.

2.5 The monitoring gap

Many protected areas exist only on paper. Governments and NGOs often lack the money to patrol vast and remote territories, and illegal loggers know it. Detection is slow: clearing can be visible on satellite images only weeks after it happened, and by then the timber is gone. A cheap, always-on, local early-warning layer can change this equation, because it turns a months-long delay into a matter of minutes.

Chapter 3

Vision and Principles

A token should leave the forest in better shape than it found it, and should use less energy doing so than the thing it replaces.

GMGN's long-term vision is a worldwide, community-governed network of solar-powered sensing and protection stations across the planet's remaining primary rainforests, funded sustainably, verified publicly and owned in large part by the people who live there.

Our design principles

1. **Local people first.** Rangers and indigenous communities are the primary actors. Technology supports them; it does not replace or override them. All activity requires free, prior and informed consent from the communities concerned.
2. **Solar by default.** Every field device runs on its own solar power. No diesel generators, no grid dependence.
3. **Efficiency everywhere.** The less energy a component needs, the longer it lasts, the cheaper it is to maintain and the smaller its footprint.
4. **Verifiable, not just claimed.** Results are recorded in open formats and anchored on-chain so that third parties can check them.
5. **Built to last.** Hardware is modular and repairable, budgets include replacement cycles, and the treasury follows spending rules designed for decades.
6. **Plain honesty.** We label targets as targets, risks as risks, and we do not promise financial returns.

Chapter 4

Solar Energy as the Foundation

Solar power is what makes remote, continuous protection affordable. A rainforest canopy receives abundant sunlight at its top, and a sensor that sips power instead of gulping it can run indefinitely from a small panel.

4.1 Why solar, and why in the canopy

Remote forest areas have no electrical grid and fuel is expensive and difficult to deliver. Solar removes the logistics burden: no refuelling trips, no emissions, and no noise that could disturb wildlife or reveal rangers' positions. Mounting panels on the upper canopy or on clearings and ranger posts gives the best exposure. Under the dense lower canopy, only a few percent of sunlight arrives, so nodes are placed where light is sufficient, or panels are mounted on poles above the tree crown.

4.2 The Green Canopy Node

The Green Canopy Node is a weatherproof, low-power sensor and communications unit. Its main components are:

- **Solar panel and charge controller.** A small monocrystalline or thin-film panel with a maximum power point tracking controller, sized with a generous margin for cloudy seasons.
- **Battery storage.** Long-life lithium iron phosphate (LiFePO₄) cells, chosen for safety, temperature tolerance and thousands of charge cycles.
- **Acoustic sensors.** Microphones feeding an on-device machine-learning classifier that recognises chainsaws, vehicle engines, gunshots and other target sounds. Raw audio is processed locally and is not streamed continuously, which saves energy and protects privacy.
- **Environmental sensors.** Temperature, humidity and, where appropriate, rainfall and light, which help interpret the audio and contribute to scientific datasets.
- **Communications.** Low-power wide-area radio (such as LoRa-class links) to a nearby gateway, and a satellite uplink at the gateway for places with no mobile coverage.
- **Tamper and location sensing.** Detects if a node is moved or opened, and signs all of its data with a device key.

4.3 An illustrative power budget

The figures below are design assumptions for planning, not measurements. They will be replaced with field data after the pilot (see Chapter 14).

Component	Average draw (assumption)	Note
Microcontroller with always-on listening	0.05 to 0.2 W	Wakes a stronger processor only on a candidate sound
On-device classifier (duty-cycled)	0.2 to 0.8 W	Runs in short bursts
Environmental sensors	under 0.05 W	Sampled every few minutes
LoRa-class radio	under 0.1 W	Transmits only short alert packets and periodic heartbeats
Gateway with satellite uplink	1 to 4 W	One gateway serves many nodes

With an average node load in the order of one watt or less, a panel of a few tens of watts and a battery sized for several days of autonomy can keep a node running through the rainy season. The key design rule is simple: size for the worst month, not the average month.

4.4 Designing for 100 years

No single device lasts a century. Solar panels typically keep most of their output for 25 to 30 years, batteries last roughly 10 to 15 years, and electronics must be expected to fail from humidity, insects and lightning. So "100 years of protection" means a system that renews itself, not a machine that never breaks. Our approach:

- **Modular design.** Panel, battery, sensor board and radio can each be swapped without discarding the whole node.
- **Standard, open specifications.** Hardware designs and firmware are published so that local technicians, universities and future suppliers can build and repair them without depending on one company.
- **Local maintenance teams.** Rangers and community technicians are trained and paid to maintain nodes. This creates local jobs and means the network does not depend on distant engineers.
- **Replacement budgeting.** The Eco-Treasury reserves part of every grant for scheduled replacement, so the cost of the second and third generation of hardware is paid for from day one.
- **Recycling and take-back.** Old panels and batteries are returned to certified recyclers. We do not leave electronic waste in the forest.
- **Technology refresh.** Every five to ten years the sensor design is reviewed and upgraded, so that the network benefits from better efficiency without a full rebuild.

4.5 Solar for the people who protect the forest

A forest guardian community that has light, phone charging and a radio is safer and more effective. Alongside sensors, the Eco-Treasury funds portable solar kits, rechargeable lamps, satellite messengers and sealed battery packs for ranger units. These kits reduce dependence on diesel and make patrols safer and longer. Equipment is donated to the community, not leased.

4.6 Environmental care of the technology itself

Deploying devices in a forest has its own footprint. Nodes are small, mounted on existing structures or poles instead of requiring new clearings, painted in low-visibility colours, and installed with the minimum disturbance. Installation teams follow environmental guidelines agreed with the local community and the reserve authority.

Chapter 5

Detection and Ranger Response

5.1 From sound to action

A sensor is only useful if it leads to a timely and safe response. The alert chain is deliberately simple:

1. Detect. A node recognises a chainsaw or engine and records time, approximate direction and a confidence score.

2. Confirm. Neighbouring nodes cross-check the sound. Several detections raise confidence and help estimate a location.

3. Alert. A short message is sent via radio and satellite to the responsible ranger unit and the local coordinator.

4. Respond. Rangers decide whether and how to intervene, often together with local authorities.

5. Record. The outcome is logged (verified, false alarm, unreachable) and used to improve the system.

5.2 Satellite monitoring as a second layer

Ground sensors and satellites complement each other. Satellites cover enormous areas at relatively low cost and can show clearing and new roads over time, but they are limited by cloud cover and revisit times. Ground sensors cover small areas with immediate response. GMGN plans to combine both and to use openly available satellite imagery where possible, adding commercial or radar imagery (which sees through clouds) for high-priority areas as budget allows.

5.3 Accuracy and false alarms

Rainforests are loud places: thunder, falling branches, insects and wind can confuse a classifier. Our approach to quality is to keep a human in the loop, to publish detection precision and false alarm rates in the annual report, and to retrain the models with locally recorded data. The pilot phase exists specifically to measure how well detection works in real conditions before the network is scaled up.

5.4 Safety and responsibility

Illegal logging and poaching are sometimes linked to organised crime, and rangers can face real danger. Alerts are therefore sent only to vetted recipients, locations are not published in real time, and the decision to intervene always belongs to the rangers and authorities, who know the local risks. GMGN does not encourage anyone to confront suspected offenders.

5.5 Indigenous leadership and consent

Many of the best-protected forests are managed by indigenous peoples. GMGN commits to working only where communities have given free, prior and informed consent, to respecting data sovereignty (communities decide what data about their territory is shared publicly), to paying fair wages for ranger and technician work, and to channelling a meaningful share of funding directly to community organisations.

Chapter 6

Proof-of-Conservation

Environmental claims are only worth something if they can be checked. Proof-of-Conservation (PoC) is GMGN's method for turning field and satellite data into a public, tamper-evident record.

6.1 What PoC records

- Which forest quadrants are covered by active nodes and for how long (uptime).
- How many alerts were raised, confirmed or marked as false alarms.
- Satellite-derived forest cover for each protected quadrant, compared with a baseline.
- Energy produced and consumed by the node network.
- How treasury funds were spent, by category and region.

6.2 How it works

Sign. Each node signs its data with a device key, which makes later tampering detectable.

Aggregate. A gateway bundles readings into compact batches and computes a cryptographic hash (a short digital fingerprint) of each batch.

Store. The full data is stored in decentralised storage such as IPFS and Arweave, which are designed to keep data available without a single owner.

Anchor. Only the small hash is written to the blockchain. This keeps on-chain cost and energy use extremely low while still proving that the data existed at a given time and has not been changed.

Verify. Anyone can download the data, recompute the hash and compare it with the on-chain record.

6.3 Being honest about limits

A blockchain proves that data has not been altered after it was recorded. It cannot prove that the data was correct when it was recorded. A faulty sensor or a dishonest operator could still write bad data. PoC therefore adds extra safeguards: device signatures, cross-checks between neighbouring nodes, comparison with independent satellite data, periodic physical inspections by independent parties, and a public channel for reporting suspected errors. We regard PoC as a transparency tool, not as a guarantee, and we will say so wherever we publish results.

6.4 Independent verification

We plan to invite independent environmental auditors and academic partners to review our methodology and results. Where recognised standards for forest protection or carbon accounting exist, we will explain how our reporting relates to them. We will not sell carbon credits or make carbon-offset claims unless they are verified under a recognised standard.

Chapter 7

The Paper Reduction Program

GMGN cannot end global paper demand. What it can do is lead by example, make the paperless option easy, and direct funding to the forests that are most at risk.

7.1 What we mean by paper reduction

The Paper Reduction Program has four parts, each of them practical and measurable.

7.2 Digital-first ecosystem

All GMGN documents, including this whitepaper, governance proposals, reports, agreements with partners and receipts for grants, are digital by default. Votes are cast on-chain, grant agreements are signed electronically, and reports are published as web pages and downloadable files. We do not print marketing material. Where printing is unavoidable, we use recycled or credibly certified paper.

7.3 On-chain records instead of paper trails

Many paper processes exist only to create a record that can be trusted later: delivery notes, certificates, proofs of origin, donation receipts. A tamper-evident digital record can do the same job. GMGN will publish open, simple templates for digital receipts and certificates anchored on a low-energy chain, which partner organisations may use free of charge. These are optional building blocks, not a requirement to hold GMGN.

7.4 Paperless pledge for partners and holders

We will invite NGOs, small businesses and community projects to sign a voluntary Paperless Pledge, committing to specific reductions in their own printing. Pledges are public and reported yearly, and participants may be recognised on the GMGN portal. To avoid greenwashing, we publish the measured reductions that participants actually report and clearly mark which numbers are self-reported.

7.5 Funding forests that are at risk from pulpwood clearing

Part of the Eco-Treasury is directed through governance votes to protect forest areas that are under pressure from pulpwood and plantation expansion, particularly where primary forest is at risk of conversion. By funding monitoring and land protection in these regions, GMGN helps reduce the supply-side pressure that paper demand creates.

7.6 How we measure it

- Pages of paper avoided in our own operations, estimated from published baselines.
- Number of partners signed to the pledge and their reported reductions.
- Hectares of primary forest under active protection in regions with pulp-related pressure.

What we will not claim. We will not state that GMGN "saves" a specific number of trees unless it can be backed by data and a clear method. Estimates will be labelled as estimates, with assumptions published.

Chapter 8

Low-Energy Technology Architecture

GMGN is built to work worldwide on very little electricity, from the sensor in the canopy to the token on the blockchain.

8.1 Why a Layer-2 network

GMGN is an ERC-20 token deployed on Robinhood Chain, an Arbitrum-based Layer-2 network. Layer-2 networks batch many transactions together and settle them on a base layer, which spreads the cost and energy of that settlement across a very large number of users. Compared with older proof-of-work blockchains, the energy used per transaction is dramatically lower. The base layer that Layer-2s settle on has also moved to proof-of-stake, which itself cut that network's energy use by a very large factor.

8.2 Our energy target

We design GMGN transactions to use well under 0.0001 kWh each. This is a design target based on the efficiency of the underlying Layer-2 architecture. Energy per transaction depends on network load and on the methodology used to measure it, so we will publish our measurement method and update the figure as independent studies become available. Where numbers differ from our target, we will report the actual numbers.

Layer	Approach	Energy principle
Token and payments	ERC-20 on an Arbitrum-based Layer-2	Shared settlement, very low energy per transaction
Data records	Hashes on-chain, full data on IPFS and Arweave	Store only what must be on-chain
Field devices	Duty-cycled, solar-powered nodes	Sleep by default, wake on events
Communications	Low-power radio with shared satellite gateways	Short messages, few transmissions
Websites and apps	Lightweight pages, efficient hosting, no autoplay media	Small page weight, green hosting where available

8.3 Smart-contract design

The GMGN token contract is intentionally minimal: a standard ERC-20 with no mint function after deployment, no transfer taxes and no hidden administrative powers. Minimal code uses less gas, is easier to review, and has a smaller attack surface. Secondary functions such as voting and treasury management live in separate contracts or off-chain tools (for example, Snapshot) so that they can be upgraded without touching the token itself.

We commit to publishing the contract source code and to commissioning an independent security audit, and to publishing the audit report in full once complete. Until an audit report is published, holders should assume that the contract has not been audited.

8.4 Energy accounting

We will measure and report the energy used by the whole GMGN ecosystem: node production and consumption, gateway and satellite use, hosting, and estimated on-chain activity. The goal is a simple yearly figure published next to the conservation results, so that the energy cost of our work is as visible as its benefits.

8.5 Working worldwide

A global project must work for people with modest hardware and unreliable internet. The GMGN portal will be lightweight, mobile-friendly and multilingual, starting with English, Portuguese and Spanish, and later French, Indonesian and others as regional programmes grow. Reports are published in open formats and are available offline as downloadable files.

Chapter 9

Token Specification

Name	GMGN
Symbol	GMGN
Standard	ERC-20
Network	Robinhood Chain (Arbitrum-based Layer 2)
Deployment	Live on Robinhood Chain Mainnet
Decimals	9
Maximum supply	100,000,000.000000000 GMGN
Smallest unit	0.000000001 GMGN
Mint / Burn	No minting after deployment. Voluntary burn is possible.
Taxes	0% on buys, 0% on sells
Token contract	0xb29C9CC561045eb152cD1103282c438634e41DD3
Treasury and admin wallet	0x6b57466208cdF7d34aa32087e0c55150cb696f69

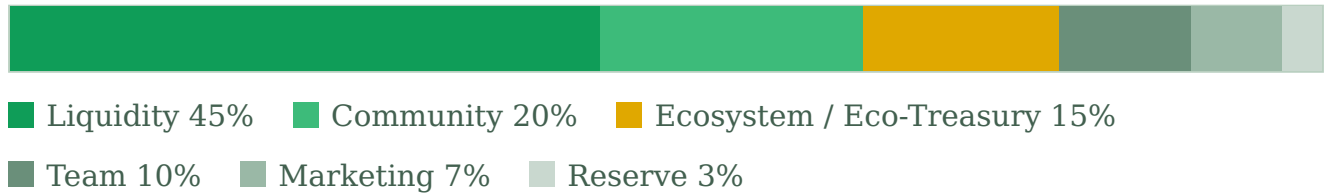
With 9 decimals, 1 GMGN equals 1,000,000,000 base units. The total supply therefore equals 10^{17} base units and is created entirely at deployment. Because no further tokens can ever be minted, the supply can only stay the same or decrease through voluntary burns.

Verify before you transact. The addresses above can be checked on the Robinhood Chain Blockscout explorer. Always compare the contract address with the one published on the official GMGN website. Fake tokens with the same name exist for almost every popular project. We never ask for your seed phrase or private key.

Chapter 10

Tokenomics and the Eco-Treasury

10.1 Allocation



Allocation	Share	GMGN	Terms and purpose
Liquidity Pool	45%	45,000,000	Locked for 24 months to support trading
Community and Airdrops	20%	20,000,000	Early supporters and holders
Ecosystem Fund / Eco-Treasury	15%	15,000,000	Land protection, ranger equipment and partnerships in the Robinhood ecosystem
Team	10%	10,000,000	12-month cliff, then 24-month linear vesting
Marketing	7%	7,000,000	Listings and campaigns, digital-first
Reserve	3%	3,000,000	Held in a multisignature vault

10.2 Why a lock and a vesting schedule

The 24-month liquidity lock and the team's cliff and vesting schedule are designed to align incentives over the long term. A cliff means that no team tokens can be accessed for the first twelve months. After that, tokens are released gradually over twenty-four months instead of all at once. Lock and vesting contracts will be published so that anyone can check them on-chain.

10.3 The Eco-Treasury

The Eco-Treasury holds 15% of the supply, equal to 15,000,000 GMGN. It exists to fund the work described in this paper: Green Canopy Nodes, ranger and community equipment, land protection and lease agreements, monitoring and satellite data, audits and the Paper Reduction Program.

10.4 Proposed spending rules for a long horizon

A treasury that is spent too quickly cannot support a century-long mission. We therefore propose the following rules, which will be submitted for a governance vote and may be amended by holders:

- **Annual spending cap.** A fixed maximum share of the treasury may be committed each year, so that funds are released over decades, not months.

- **Maintenance first.** A defined portion of every deployment budget is reserved for repair and replacement before any expansion is funded.
- **Multisignature custody.** Treasury movements require multiple independent signers, with signer identities and the signing policy published.
- **Milestone-based grants.** Grants are paid in stages against verified milestones, not in a single payment.
- **Public ledger.** Every treasury transaction and its purpose is listed in a public report.
- **Diversification policy.** Governance may decide to hold part of the treasury in stable assets to fund operations through market downturns. Any such policy will be put to a vote and its risks explained.

Please note. The value of treasury assets can rise and fall, and may fall to zero. The size of the programme we can fund depends on those values and on the community's decisions. No specific funding amount, hectare figure or timeline is guaranteed.

10.5 Community and airdrops

The Community allocation rewards early supporters and holders. Airdrop rules, eligibility and any vesting will be published in advance. We never ask holders to reveal a seed phrase or private key, and no genuine GMGN airdrop requires one.

10.6 Marketing principles

Marketing funds are used for exchange listings, partnerships and education, in a digital-first way. We do not pay for misleading promotion and we will always label paid content as paid.

10.7 Presale

GMGN is offered in an official presale at a fixed price of **1 GMGN = 0.25 USD**, payable in USDC on Robinhood Chain Mainnet through the official GMGN website. The terms of the presale are published on that website, and purchases are made directly from your own wallet.

The presale price is a fixed offer price. It is not a market price, it is not a prediction and it is not a guarantee that GMGN will later trade at the same price or higher. The market price on exchanges is determined by supply and demand and may be lower than the presale price, including far lower. Please read Chapter 16 and the Legal Disclaimer before taking part.

Chapter 11

Governance

Decisions about rainforest acquisition, conservation grants and solar kit allocations are made through transparent on-chain voting, using Snapshot, by GMGN holders.

11.1 What holders vote on

- Which forest quadrants receive new Green Canopy Nodes.
- Approval of land protection agreements and protective leases.
- Annual budgets and changes to the treasury spending rules.
- Selection of NGO and community partners.
- Adoption of audit and verification providers.

11.2 Proposal process

1. **Discussion.** A proposal is drafted publicly on the community forum, with a clear budget, expected results, risks and a named responsible party.
2. **Review.** A technical and conservation review panel publishes a short assessment, including any concerns about local consent or safety.
3. **Vote.** Holders vote on Snapshot during a fixed period. Quorum and approval thresholds are stated in advance.
4. **Execution.** If approved, funds are released in stages by the multisignature custodians.
5. **Report.** The responsible party publishes progress and final reports, verified through Proof-of-Conservation.

11.3 Safeguards

Token voting has known weaknesses: large holders can dominate, and turnout can be low. To reduce these risks we propose a community conservation council with seats reserved for ranger and indigenous representatives, who may pause proposals that would harm local communities or violate consent. We also propose a cap on the voting weight of any single address for treasury decisions, time delays between approval and execution, and a clear emergency procedure. These mechanisms will themselves be put to a vote before taking effect.

11.4 Towards a DAO

Full decentralisation is a gradual process. Initially, the founding team coordinates operations under the community's mandate. As processes mature, authority moves progressively to a Global Rainforest Protection DAO (see Chapter 14), with legal structures chosen to comply with the rules of the relevant jurisdictions.

Chapter 12

The Worldwide Ecosystem

Rainforests exist on every tropical continent. GMGN is designed to work in all of them, adapting to local law, culture and ecology.

12.1 Priority regions

Region	Main pressures	Likely approach
Amazon basin	Cattle, soy, illegal logging, mining, roads	Acoustic nodes in indigenous territories and reserves, ranger equipment, satellite alerts
Congo Basin	Small-scale agriculture, charcoal, logging, mining	Community-managed forests, solar kits, local ranger partnerships
Southeast Asia	Palm oil, pulpwood plantations, logging	Monitoring at forest edges, support for communities, Paper Reduction Program focus
Other tropical forests	Varies by country	Evaluated case by case through governance

12.2 Partnerships

GMGN does not intend to work alone. We aim to partner with established rainforest NGOs, indigenous federations, universities, satellite data providers and national park authorities. Partners bring local knowledge, legal standing and experience, and we bring funding, technology and public transparency. Partnerships will be published with their terms, and no partner will be named in our materials without their agreement.

12.3 Adapting to local context

Each region gets a local programme lead, local language materials, and agreements consistent with national law and community decisions. Technology choices, such as radio frequencies and satellite providers, follow local regulations. We do not install anything without the necessary permits.

12.4 A coin that works everywhere

Because GMGN is a token on a public network, anyone with an internet connection and a compatible wallet can take part, subject to local laws. The low transaction cost and low energy use of a Layer-2 network make small transactions practical, which matters for communities and supporters with modest means. Participation, however, always carries financial risk (see Chapter 16) and is not suitable for everyone.

12.5 Education and community

A small part of the budget supports education: open training material for rangers and technicians, public dashboards that show forest data in plain language, and school materials that explain rainforest ecology and energy. Education is delivered digitally wherever possible.

Chapter 13

The 100-Year Plan

A century is too long to plan in detail and too short to ignore. We plan in horizons, each with clear goals and a clear review.

Years 0 to 3: Prove the model (2026 to 2029)

Deploy the pilot, measure detection accuracy and energy use, publish the first Proof-of-Conservation reports and establish the Eco-Treasury processes. The goal is evidence: does the approach work, at what cost, with what community acceptance?

Years 3 to 10: Scale responsibly

Expand to more territories where consent and demand exist. Standardise the hardware, reduce its unit cost, and build local manufacturing and repair capacity. Move governance progressively to the DAO.

Years 10 to 30: First renewal cycle

Replace the first generation of batteries and electronics, and refresh the sensor design. This is the real test of longevity, which is why replacement is budgeted from the first day. Transfer more operational responsibility to community organisations.

Years 30 to 60: Local ownership

Ranger and community organisations own and operate most of the network, with GMGN governance providing funding and transparency tools. Technology is likely very different, and the principles stay the same.

Years 60 to 100: Stewardship

The goal is a permanent, locally led protection system funded by a durable endowment and by partners, with open data that outlives any single organisation. By then, the best outcome is that the network is so well embedded that it no longer needs GMGN to exist.

13.1 How the model stays solvent

A century-long plan requires a funding model that does not depend on continuous growth. The proposed approach is an endowment-style treasury: spend a controlled fraction each year, reserve funds for renewal, seek co-funding from NGOs and public programmes, and keep running costs as low as possible through solar autonomy and local maintenance. Whether this succeeds depends on market conditions and the community. It is a design goal, not a promise.

13.2 Contingency

If GMGN as a project were to wind down, the governance rules should require that remaining treasury funds and hardware be transferred to qualified conservation organisations and local communities, and that all data be released as open data. We will propose this as a formal rule.

13.3 What would change our plan

We will revise the plan if evidence shows that the sensors do not deter illegal activity, if communities do not want the technology, if a better approach appears, or if funding falls short. Changing course in response to evidence is part of the design.

Chapter 14

Roadmap 2026 to 2028

The roadmap below describes planned milestones. Dates are targets and may change.

Phase 1: Initial Green Seed (Q4 2026)

The GMGN token is live on Robinhood Chain Mainnet and the presale is running. Publication of this Rainforest Whitepaper, establishment of the Eco-Treasury processes and its multisignature custody, publication of lock and vesting contracts, and first partnership discussions with rainforest NGO coalitions. Commissioning of the independent contract audit.

Phase 2: Solar Canopy Pilot (Q1 2027)

Deployment of the first 50 solar-powered IoT canopy sensors in Amazonian reserves, with the consent of local communities. Launch of a live satellite monitoring dashboard on the GMGN portal. Measurement of detection accuracy, power budget and field durability.

Phase 3: Proof-of-Conservation Expansion (Q3 2027)

Scale to 500 solar nodes, with the goal of protecting 10,000 hectares of primary rainforest and equipping 20 indigenous ranger units with portable solar arrays. First independent verification of results. Launch of the Paperless Pledge programme.

Phase 4: Global Rainforest Protection DAO (2028)

Full decentralisation of the conservation treasury, expansion to the Congo Basin and Southeast Asia, and exchange listings where legally and technically appropriate.

Conditions. Each phase depends on funding, regulatory conditions, local consent, supply of hardware, weather, and the results of the previous phase. Delays or changes are possible, and we will explain them openly.

Chapter 15

Transparency, Metrics and Reporting

We will report on a regular schedule, using the same indicators every year so that progress can be compared over time.

Area	Indicator	Frequency
Coverage	Hectares under active monitoring, nodes online, uptime	Quarterly
Detection	Alerts raised, confirmed, false alarm rate, response time	Quarterly
Forest condition	Forest cover change in protected quadrants versus baseline	Annually
People	Rangers equipped and employed, community funds distributed	Annually
Energy	Solar energy generated, energy used by the ecosystem, estimated on-chain energy	Annually
Paper	Pledges signed, self-reported reductions, own operations	Annually
Treasury	All inflows and outflows, with purpose and recipient	Monthly
Security	Audit reports and fixes	On publication

All reports are published as open files and anchored through Proof-of-Conservation. We will publish negative results too. A project that only reports good news is not credible.

Chapter 16

Risk Factors

Anyone considering acquiring GMGN should read the following carefully. The list is not complete.

16.1 Financial and market risks

- **Total loss.** The value of GMGN can fall to zero. You may lose all of the money you put in.
- **Volatility.** Crypto assets can change in price very quickly and by very large amounts.
- **Liquidity.** There may not be enough buyers when you want to sell, or trading may become impossible.
- **No promise of profit.** GMGN is a community token. It is not a share, a bond or a savings product, and it gives no right to dividends, revenue or repayment.

16.2 Technical risks

- **Smart-contract bugs.** Even carefully written code can contain errors. An audit reduces risk but cannot remove it.
- **Network risk.** The Layer-2 network, bridges or wallets may suffer outages, attacks or failures.
- **Presale price.** The presale price of 0.25 USD per GMGN is not a market price. Trading prices can be lower, and you may be unable to sell at the presale price.
- **Key loss and scams.** If you lose your private key or are tricked into revealing it, your tokens cannot be recovered.

16.3 Regulatory and legal risks

- Laws on crypto assets differ between countries and are changing. Some activities may be restricted or prohibited where you live.
- New rules could affect the token, the treasury, exchange listings or our ability to operate in certain regions.
- GMGN is not affiliated with Robinhood Markets, Inc.

16.4 Project and environmental risks

- **Execution risk.** Milestones may be delayed, reduced or not achieved.
- **Hardware and weather.** Storms, lightning, humidity, wildlife, theft and vandalism can damage equipment.
- **Local factors.** Changes in local government, land rights, security situation or community decisions may halt activities.
- **Partner risk.** The programme relies on third-party non-profits and suppliers whose performance we cannot fully control.
- **Impact uncertainty.** Monitoring does not guarantee that illegal activity will stop, and forest outcomes depend on many factors outside our control.

- **Claims.** Environmental estimates in this paper are based on assumptions that may turn out to be wrong.

Legal Disclaimer

No financial advice. This whitepaper is provided for educational and informational purposes only. We are not financial advisors, investment advisors, tax advisors or legal advisors. Nothing in this document, on our website or in any of our communications is, or should be understood as, financial, investment, legal or tax advice, or as an offer or solicitation to buy or sell any asset.

For experienced persons only. Crypto assets are highly speculative and carry a high risk of loss, including the total loss of the amount you invest. We expressly state that only experienced persons who understand these risks, and who can afford to lose every unit of what they invest, should consider acquiring GMGN. If you are not experienced with crypto assets, or if you are unsure, do not invest. Seek independent professional advice from a qualified and licensed advisor before making any decision.

No promise of profit. GMGN is a community token. We make no promise, representation or guarantee of any profit, price development, return, liquidity or future value.

No guarantees about the programme. Statements about future plans, timelines, hectares, nodes, energy figures, partnerships and environmental outcomes are forward-looking, are based on assumptions, and may change or may not be achieved. Environmental programmes depend on third parties and on factors we do not control.

No liability. To the fullest extent permitted by applicable law, the creators, contributors, team members, partners and affiliates of GMGN accept no liability whatsoever for any loss or damage of any kind, direct or indirect, including financial loss, loss of profit, loss of tokens, technical failure, security breach, regulatory action or reliance on any information in this document.

Own responsibility. Everyone acts entirely on their own responsibility. You are solely responsible for your own decisions, for researching the project, for checking the laws that apply to you, for the security of your wallet and keys, and for any taxes that may arise. By acquiring or holding GMGN, you confirm that you have read and understood this paper and that you accept all associated risks.

Jurisdiction. This document is not directed at any person in a jurisdiction where its publication or the acquisition of GMGN is prohibited. It is your responsibility to make sure that your participation is lawful where you live.

No affiliation. GMGN is not affiliated with, endorsed by or sponsored by Robinhood Markets, Inc. Any reference to the Robinhood ecosystem or Robinhood Chain is purely descriptive of the technology the token is built on.

We are not financial advisors. Only experienced persons should invest, and only money they can afford to lose completely. We accept no liability. Everyone acts at their own risk and on their own responsibility.



GMGN_Official