

\$WHUF: Token Economics for Decentralized Reputation

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Abstract

Ethos is a decentralized reputation protocol where users build credibility through vouching, reputation markets, reviews, slashing, and social coordination. The network currently operates with ETH—users stake Ethereum in other users’ profiles to signal trust and trade reputation markets to express views on trustworthiness, creating a graph of economic relationships that underpins the credibility score. \$WHUF introduces a native token that replaces ETH across the protocol, aligning token ownership directly with network participation. Rather than using an external asset with no inherent connection to the reputation graph, participants vouch and trade with the network’s own unit of economic commitment. This paper describes the token’s role within the existing protocol, the distribution of supply, and the mechanics of the public sale—including a price guarantee for buyers who vouch their tokens into the network (85% at market-discovered prices, rising to 90% if the auction clears at or above \$75M FDV), a mechanism designed to bootstrap the credibility graph by getting tokens working from day one.

1. Introduction

Ethos has operated for over a year with ETH as the sole vouching asset. This was intentional. Before introducing a native token, the protocol needed to prove that its reputation model was robust, dynamic enough to handle real-world conditions, and resistant to manipulation. Over that year, the team has adapted the system through thousands of attempts to spoof, spam, and Sybil-attack the credibility graph. The protocol has been tested, iterated on, and hardened in production with real economic stakes.

Users stake Ethereum in other users’ profiles to express trust, and trade in perpetual reputation markets where they speculate on the trustworthiness of Ethos profiles. Together, vouching and markets create financial relationships that feed into the credibility score. This model works: it produces real signal, carries real risk, and has generated a credibility graph with meaningful economic weight.

But ETH is an external asset. Its value is determined by the broader Ethereum ecosystem, not by the health or growth of the Ethos network. A user who vouches ETH has skin in the game, but that skin is subject to exogenous price movements. An external asset also limits what the protocol can give back: Ethos cannot distribute an asset it does not control, so a year of vouching produced signal without rewarding the people producing it. A native token solves both problems. It ties staked value directly to the network those

stakes are securing, so the economic weight behind the credibility graph reflects Ethos’s own fundamentals rather than an external system’s, and it gives the network a way to reward the participation it depends on: contributor rewards, paid in \$WHUF to active vouchers from a fixed pool, described in detail in Section 5.7.

\$WHUF (named after the “Whuffie,” a reputation-based currency in Cory Doctorow’s *Down and Out in the Magic Kingdom*) changes this relationship. The token design is inspired by the alignment mechanisms securing proof-of-stake networks. On Ethereum, validators stake ETH to secure the chain. Their staked capital earns rewards because the work they perform (validating transactions) is essential to the network. If they act dishonestly, they can be slashed. The economic incentives align participants with the health of the system they are helping to operate.

Ethos works in a similar way, but the “validation” happens at the social layer rather than algorithmically. Users vouch \$WHUF in other people to signal trust, and trade reputation markets denominated in \$WHUF to express their view on a profile’s trustworthiness. Both are raw inputs that the network uses to produce credibility assessments. Vouching secures the reputation graph the same way staking secures a blockchain: it creates an opportunity cost for signaling, an economic cost for dishonesty, and an economic reward for genuine contribution. Markets add a second dimension; a continuous, liquid signal that captures the crowd’s evolving judgment on any profile. Vouchers earn contributor rewards from the protocol, because the work they perform, identifying who is trustworthy, is essential to the network. If vouchers back bad actors, they can be slashed.

The core thesis is that a reputation network benefits from having its economic layer denominated in an asset whose value is endogenous to the network, rather than borrowed from an external system. When vouching and reputation markets both use a native token, every act of staking trust or taking a position on a profile simultaneously represents a stake in the network itself. The participant’s economic outcome is tied to the reputation graph they are helping to build. In contrast, when the economic layer is dependent on a larger external system, that system’s influence could dominate the Ethos reputation system.

2. The Role of \$WHUF

Every economic mechanism in Ethos—vouching, fees, markets, bonds—runs through a single native asset. This is a deliberate architectural choice that provides the network four properties no external asset can:

- **Alignment.** The people who build the credibility graph are the network’s owners. Contributors hold the asset whose fate is tied to the integrity of the graph their participation creates.
- **Incentives.** The network rewards the contributors who deepen the credibility graph—perpetually and automatically, from a fixed pool committed at genesis and emitted by smart contract. Contributors are paid in ownership of the network they are building.
- **Self-sufficiency.** Usage sustains the protocol. Fees are burned, not collected—no treasury capture, no revenue extraction, no inflation. The economic layer has no income and no expenses: spam resistance is created by fees burned at the moment of use, and contributor incentives come from a pool fixed at genesis. There is nothing to collect, and therefore nothing to corrupt.
- **Together, these compound.** Contributor rewards draw tokens into vouches; staked tokens deepen the credibility graph; a more credible graph attracts more usage; usage burns supply and pays the fees that make spam self-defeating; and contributors accumulate ownership in the network they are building. No step requires an external subsidy or new issuance.

The subsections that follow describe each mechanism in turn.

2.1 Vouching

Vouching is the core mechanic of Ethos: to be reputable, there must be skin in the game. This reinforces a fundamental principle of economic security—credibility is cheap to claim but expensive to fake when it requires putting real value at risk. By staking \$WHUF in another person’s profile, a user makes a tangible economic commitment to their assessment of that person’s trustworthiness. If the vouched-for party behaves badly, the voucher’s stake can be slashed. Reputation without consequence is just opinion; vouching makes it a costly, and therefore more credible, signal.

With the introduction of the native token, \$WHUF replaces ETH across the protocol. Core vouching mechanics—staking in profiles, mutual vouches, unvouching, and slashing penalties—carry over, denominated in \$WHUF rather than ETH. Two changes accompany the transition: existing vouch fees on ETH-based vouches are removed, and the legacy voucher reward system (where a percentage of fees from vouches flowed to earlier vouchers in the same profile) is replaced by the contributor rewards pool described in Section 5.7.

This replacement is not merely cosmetic. When ETH is the vouching asset, a user who vouches 1 ETH in a trusted friend is making a statement about that friend, but the value of their vouch fluctuates with Ethereum’s market price, a variable entirely outside the Ethos network’s domain. When \$WHUF is the vouching asset, the value of that vouch is a function of the network’s own health. The credibility graph becomes self-referential: the asset used to express trust derives its value from the system that trust sustains.

This alignment extends beyond any single vouch. The credibility graph is built from the accumulated stakes of its participants—and

those participants hold the asset whose fate is tied to the graph’s integrity. Contributors to Ethos are not users of infrastructure someone else owns; the network is constituted by their staked conviction, and they hold the asset that reflects its health. An external asset can price a vouch, but it cannot make the voucher an owner of the network their vouch strengthens.

2.2 Protocol Fees

\$WHUF also plays a role in the network similar to a gas token on an L1 or L2. Just as ETH denominates transaction fees on Ethereum and its rollups, \$WHUF is used to pay for protocol-level actions on Ethos. Writing a review, creating an attestation, initiating a vouch, and other interactions that write to the reputation graph each require a small \$WHUF fee. This positions \$WHUF not just as a staking asset but as the unit of account for economic activity within the protocol.

This fee model serves multiple purposes. First, it creates a natural abuse prevention mechanism. Without an economic cost, a reputation network is vulnerable to manipulation through volume: fake reviews, Sybil account attestations, and coordinated vouching rings. It aligns the cost of using the network with the value of the network, ensuring that increased demand for the reputation layer results in increasing costs for protocol actions. A per-action fee is negligible for genuine participants but prohibitive at scale for Sybil attackers. Attacking the reputation graph requires acquiring and spending the network’s native asset, making manipulation economically self-defeating.

All \$WHUF collected through protocol fees is permanently burned by the smart contract. Vouch fees, transaction fees, and any other protocol-level charges destroy the tokens on receipt rather than redirecting them to a treasury or redistributing them to holders. This makes every interaction with the reputation graph a small deflationary event. Burning keeps reputation signals costly — deterring spam and Sybil attacks — without directing fee revenue to founding contributors or any control person. A fee paid in an external asset must go somewhere—a treasury, a team, a revenue contract—creating an extractive relationship between the protocol and its users. A burned fee benefits no intermediary. The protocol requires no revenue model; its upkeep is paid by its own use.

Fee amounts are per-action parameters written into the smart contracts, not fixed constants. Fees on some or all actions (reviews, attestations, bonds, human verification, broker posts, and other interactions) may be set to zero at launch and adjusted as the network matures. Whenever a fee is non-zero, 100% of it is burned; the mechanism described above applies to any fee the contracts charge, not to a fixed fee schedule.

2.3 Market Denomination

Ethos Markets are perpetual reputation markets where users speculate on the trustworthiness of Ethos profiles. Each market has a trust and distrust side, priced by an automated market maker using a Logarithmic Market Scoring Rule (LMSR). Buying trust votes pushes the trust score up; buying distrust votes pushes it down. These markets do not resolve, because trust is not a binary

event with a fixed endpoint. Participants can exit a position at any time by selling their trust or distrust votes back into the market, returning liquidity to the AMM pool. There is no lock-up or expiry. Positions remain open indefinitely and can be unwound whenever the holder chooses.

With the introduction of \$WHUF, all market pairings are denominated in the native token. Every trust and distrust position is priced in \$WHUF.

This also reinforces the self-referential economic loop at the core of the token design. A user who believes someone is trustworthy can vouch \$WHUF in their profile and buy trust votes in their market, both denominated in the same asset. The reputation network, the speculation layer, and the economic commitment all flow through a single token. There is no leakage to an external asset. All economic activity within Ethos, whether vouching, paying fees, or trading reputation markets, runs through \$WHUF.

2.4 Bonds and Broker

\$WHUF also serves as the cost basis for protocol actions that require spam resistance beyond standard fees. Two examples illustrate this role.

Human Verification bonds are created when a validator attests that another user is human. Each bond requires a \$WHUF deposit that persists for the duration of the bond (three years), is recorded onchain, and can be slashed if the verification is later proven fraudulent. The deposit ensures that verification carries real economic weight, making it costly to create fraudulent verifications at scale. The full mechanism is described in the Ethos Human Verification whitepaper.

Broker is a peer-to-peer bulletin where users can post and discover service listings — for example, offering smart-contract audits, design work, or advisory services. It is not a matching engine or intermediary; the protocol simply hosts the listing and the parties transact independently. Broker posts on Ethos require a nominal \$WHUF fee to publish. This prevents the bulletin from being flooded with spam listings while keeping the cost negligible for genuine participants. In both cases, \$WHUF functions analogously to a gas token on an L1: a small cost denominated in the network's native asset that makes abuse expensive without restricting legitimate use.

3. Protocol design philosophy

Ethos is designed to operate as a public good. The protocol is governed by the Ethos Foundation, a Cayman foundation entity whose mandate is the long-term health and neutrality of the reputation layer. This is a deliberate structural choice. Many token projects are structured around revenue generation, where protocol fees flow back to a company or are distributed to token holders as dividends. These are valid models for certain types of protocols, but they are not the right model for a reputation layer. The Ethos Network is infrastructure, not a business.

Three entities are involved in the Ethos ecosystem, each with a distinct and limited role. **Ethos Network, Inc.** (“Ethos Labs”) is the development company that created the initial Ethos Network protocol and currently maintains a non-exclusive frontend for user convenience at app.ethos.network. The **Ethos Foundation** is an independent Cayman foundation entity that holds the protocol's intellectual property, originally licensed from the development company, and whose sole mandate is the long-term neutrality and availability of the reputation layer. **Ethos Token Ltd.**, a BVI-incorporated subsidiary of the Ethos Foundation, conducts the token sale described in Section 6 and is the counterparty to sale participants. As of the initial token sale, Ethos Labs' involvement will not be essential to the operation of the network; the onchain contracts, the vouching graph, and the token function independently of any frontend or service provider.

The closest structural analog is Ethereum and the Ethereum Foundation. The Foundation exists to steward protocol development and support the broader ecosystem, not to capture value from it. It does not capture transaction fees or extract revenue from network activity. ETH has value because the network is useful and people need it to transact, not because a company generates profit from it. \$WHUF has value because the reputation network produces useful credibility assessments and people need the token to participate in it.

Protocol fees are permanently burned, not captured by the Foundation or any other entity as revenue. There are no dividends, no revenue shares, and no buyback mechanisms. The token is the purest form of a protocol asset: it has utility within the system and value derived from the network it powers. This structure is what allows Ethos to credibly serve as neutral infrastructure for reputation. A reputation layer with a profit motive has incentives that can conflict with neutrality. A reputation layer structured as a public good is better positioned to remain impartial.

Critically, the Ethos protocol exists onchain regardless of Ethos Labs' continued operation or activity. Users do not need to use the Labs frontend app to engage with the smart contracts—the vouching, market, and reputation infrastructure is permissionless and self-contained. Anyone can interact with the contracts directly, integrate them into their own applications or protocols without permission or licensing (beyond the permissive open source license provided), or fork the codebase entirely. The protocol's value is not gated by a single frontend or company.

4. Token Design

\$WHUF has a fixed maximum total supply of 10,000,000 (ten million) tokens.

The fixed supply is a deliberate design choice. Inflationary token models require ongoing justification for new issuance and create uncertainty about long-term dilution. A fixed supply makes the economics legible: every participant knows exactly what fraction of the network their holdings represent, and that fraction cannot be diluted by future issuance.

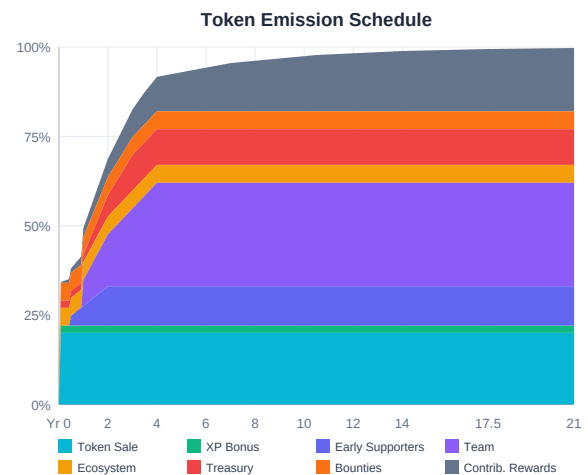
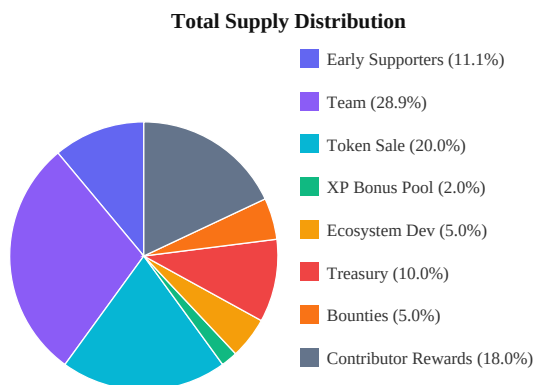
The value of \$WHUF to a holder is a function of how they use it within the network. Vouching earns contributor rewards proportional to the tokens a user has actively committed. The more tokens a user puts to work, and the better their judgment about who to support, the greater their share of the rewards.

Protocol actions like writing reviews, creating attestations, posting broker listings, forming verification bonds each require \$WHUF, making the token necessary for anyone who wants to participate in the reputation layer. Reputation markets require \$WHUF to take positions, and participants who accurately assess the trustworthiness of profiles are rewarded through market mechanics. In each case, the token's utility flows from what the holder does with it.

All \$WHUF spent on protocol fees (vouch fees, transaction fees, and other protocol-level charges) is permanently burned by the smart contract. No tokens are recycled, redistributed, or sent to a treasury. This burn mechanic is a byproduct of network usage: as the reputation layer sees more activity, more tokens are consumed through the protocol actions that participants are already performing. There is no mechanism that rewards holders independent of actual network participation.

5. Distribution

The total supply is divided between early supporters and team allocations (40%) and community allocations (60%). This split reflects a deliberate choice to recognize the team and early supporters who built the protocol, while reserving the majority of supply for the broader community.



5.1 Early Supporters (11.06%)

Early supporters were entirely community driven: friends, family, and colleagues of the Ethos protocol founders. Ethos co-founder Trevor Thompson personally invested alongside them, writing one of the largest checks in the pre-seed round. There was no institutional lead. The people who funded the earliest stage of Ethos did so because they believed in the team and the idea, not because a fund told them to.

Ethos has always aimed to raise from the community, and this token sale is a continuation of that approach. Early supporters helped bootstrap Ethos as the protocol team learned how to tweak, adjust, and modify a highly experimental and unproven reputation model. Their capital gave the team the runway to iterate through multiple seasons of XP design, build the vouching graph from scratch, and prove that financially-backed trust produces meaningful credibility signal.

Early supporters participated across two rounds: pre-seed and seed. The Seed round was conducted through Echo, a platform that enables community-driven fundraising. This structure was intentional: the creators chose not to take on large institutional venture capital in order to limit outsized control of token distribution. Notably, total venture capital exposure represents approximately 1.1% of the total token supply, and no external investor owns more than 1% of the token supply individually. Most of the investor tokens are held by individual community members, many onboarded through Echo during the Seed round.

Round	% of Supply	VC Exposure
Preseed	8.00%	~0.52%
Seed	3.06%	~0.60%
Total Early Supporters	11.06%	~1.12%

No early supporter tokens are liquid at TGE. Early supporter tokens unlock over 24 months with a 6-month cliff. At the cliff, 25% of the allocation unlocks; the remaining 75% unlock linearly on a monthly basis over the subsequent 18 months. These lockups ensure that founding contributors are not able to influence the

market before the community’s organic activities are well established.

5.2 Team (28.94%)

28.94% of supply is allocated to the founders, team members, and advisors who have built and stewarded the protocol thus far. This includes the core engineering and product team as well as strategic advisors who have contributed to protocol design, tokenomics, and go-to-market. Team tokens unlock over 4 years with a 1-year cliff, then linearly over the subsequent 36 months, from the date of the Token Generation Event.

Combined with early supporters, the total founding allocation is 40% of supply—below industry norms for comparable protocols, where founding allocations typically range from 40–50%. Because the project did not require large venture capital rounds, there is no concentrated institutional block positioned to exert selling pressure at unlock. Similarly, the team’s token unlock schedule prevents founding contributors from exerting significant sell pressure during the protocol’s nascency.

5.3 Community Allocation (60%)

Allocation	% of Supply	Unlock
Token Sale	20%	30-day lock from TGE
XP Bonus Pool	2%	Unlocks with sale tokens
Ecosystem Development	5%	Ethos Foundation discretion
Treasury	10%	8%: 12-month cliff, then linear over 24 months; 2% (liquidity): 30-day lock, available at unlock (Oct 8, 2026)
Bounties	5%	Ethos Foundation discretion
Contributor Rewards	18%	Continuous decay; Foundation-adjustable rate

Twenty percent of total supply (2,000,000 tokens) is offered through the token sale. The XP Bonus Pool is additional supply that comes on top of the sale allocation, not out of it, adding 200,000 tokens (2% of supply) for a total of 2,200,000 tokens entering circulation as of the initial token sale. The auction (described in section 6) determines the price per token, not the quantity sold. The auction will include a minimum price floor of \$1M FDV (\$0.10 per token) and a maximum price cap of \$99M FDV (\$9.90 per token), allowing the market to determine the clearing price through competitive bidding within that range.

5.4 Ecosystem Development (5%)

5% of total supply is allocated to ecosystem development: grants for builders integrating Ethos credibility scores, API adoption incentives, and partnerships that expand the network’s reach. These tokens are held by the Ethos Foundation and deployed at the Foundation’s discretion. They are not subject to a programmatic unlock schedule, and have not been pre-allocated to any entity, including Ethos Labs.

5.5 Treasury (10%)

10% of total supply (1,000,000 tokens) is reserved as a Foundation treasury for operational flexibility and unforeseen needs. The Foundation’s treasury is earmarked for the furtherance of its mission in maintaining the reputation layer, and may be sold at prevailing market prices to fund Foundation operations.

Of the 10% treasury allocation, 8% (800,000 tokens) is subject to a 12-month cliff—no tokens enter circulation for the first 12 months following TGE. After the cliff, these tokens unlock linearly over the subsequent 24 months.

The remaining 2% (200,000 tokens) is earmarked for liquidity provision, including self-provided liquidity on decentralized exchanges and market-maker loan arrangements. Like all other allocations, this portion is locked through the 30-day price guarantee period and becomes available after that period ends, at which point it can be deployed to liquidity pools to support order-book depth and price discovery. The Ethos Foundation retains discretion over how these tokens are deployed, and any market-maker loan arrangements are governed by separate commercial agreements.

5.6 Bounties (5%)

Five percent of total supply is allocated to bounties: rewards for participants who surface new information that protects the integrity of the network. For example, a user who identifies and provides evidence of a Sybil farm abusing Ethos, resulting in a successful slash (as described in section 8.3), may be rewarded with \$WHUF from this pool.

Bounties are hosted via Ethos Broker smart contracts and posted by the Ethos Foundation. This pool is intentionally flexible rather than programmatic, because the types of threats the network will face are difficult to predict in advance. The Foundation can define bounty categories, set reward amounts, and adjust priorities as the network evolves and new attack vectors emerge.

Beyond protecting the network, this pool can also be used to incentivize contributions to the protocol outside the contributor rewards pool (section 5.7): rewarding work that the programmatic emission model does not capture, such as building integrations, improving tooling, or other contributions the Foundation deems valuable to the network.

5.7 Contributor Rewards (18%)

The contributor rewards pool (1,800,000 tokens, 18% of supply) exists to incentivize the activity that makes Ethos valuable: vouching. Users who vouch for others put tokens at economic risk to signal trust, producing the signal that powers the credibility graph. Contributor rewards compensate these commitments by distributing tokens to participants proportional to the value they contribute to the network.

The rewards contract (EthosRewards) uses a continuous exponential decay model. At any moment, the instantaneous emission rate is proportional to the undistributed balance remaining

in the pool: as tokens are claimed, the pool shrinks and the rate decreases automatically. This produces a front-loaded curve—early participants receive higher rewards when the network most needs their contributions—that tapers smoothly over time without discrete steps or era boundaries.

The decay is governed by an emission-rate parameter (emissionRateBps) that defines the annualized percentage of the remaining pool emitted per year. The Ethos Foundation can adjust this parameter to tune incentive levels as the network matures—for example, increasing the rate to attract participation during early growth or decreasing it as organic utility takes over. The parameter is bounded at a maximum of 100% of the remaining pool per year, and any change takes effect only from the point of adjustment forward; previously accrued rewards are unaffected.

Because a constant fraction of the remaining pool is emitted each year, emissions are largest in the early years and decline continuously thereafter, with each period emitting less than the one before. Because the decay is continuous and asymptotic, emissions never fully cease but become negligible over time. These projections assume a constant emission rate and are illustrative; actual emissions will vary if the rate is adjusted.

Rewards are proportional to the number of tokens a user has actively committed through vouching, not the number of profiles they interact with. Each user’s share of the emission is their committed balance divided by the total committed across the network. This keeps the incentive aligned with meaningful participation in the credibility graph rather than encouraging shallow activity across many profiles.

5.8 On-Chain Addresses

All token allocations are held in Safe (Gnosis Safe) multi-signature wallets on Base (Chain ID 8453). Each wallet requires 3-of-5 signer approval for any transaction. The following table lists the allocation wallets and the WHUF token contract address. All addresses can be independently verified on Basescan. Contributor rewards are held and emitted directly by the EthosRewards smart contract; its address will be published at deployment.

Wallet	Address
\$WHUF Token Contract	0xeeee77bC7e82c0d4166d52F58239D4c5Bf41e eee
Token Sale	0x88cE3F766d791A0F9e7e4d6101e79869815cC 440
Early Supporters	0x41fcF710ebeC93163CE862D40b2Ea57DDe0c7 6ae
Team	0x0783Ee333a8605aAc39c5f523BB2474B2A1c5 525
Treasury (Foundation)	0x26A866D3d3902b1df131ffc65eA8e8B972D61 262
Ecosystem Development	0xB53422dC4A4B96CC26c15AceCCB03A326Aca8 532
Bounties	0xb604624B6570204a3B1b6EE36A0A3b434F393 A02

6. The Token Sale

6.1 English Auction

The token sale is conducted as an English Auction powered by [Sonar](#). In this format, participants submit competitive bids specifying both a price they are willing to pay (USDC) and number of tokens. Bids are visible to all participants and can only increase, creating transparent competitive pressure. All bids above the clearing price are filled in full; bids at exactly the clearing price may be partially filled on a pro-rata basis. Every successful bidder pays that same clearing price for auction tokens—regardless of what they originally bid. This mechanism offers efficient, fair price discovery: the market itself determines the price through the aggregate of all bids, producing a single clearing price that reflects what participants collectively believe the asset is worth.

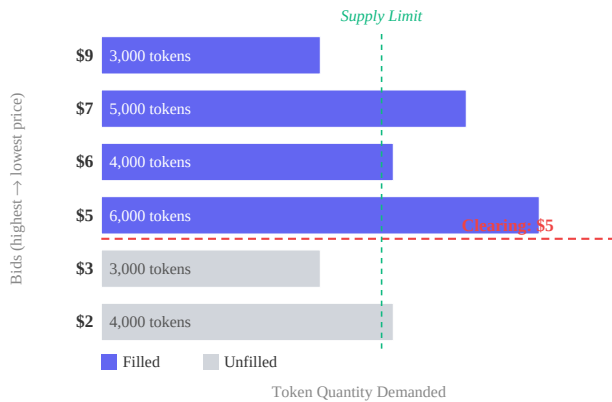
6.1.1 How Bidding Works

2,000,000 tokens (20% of supply) are offered in the auction. During the auction window, participants submit bids in USDC specifying two parameters: the maximum price per token they are willing to pay, and the total number of tokens they intend to buy. A minimum bid of \$100 USDC is required to participate. The minimum accepted bid price corresponds to a \$1M fully diluted valuation (\$0.10 per token). The maximum bid price cap is \$9.90 per token, corresponding to a \$99M fully diluted valuation. Bids can be revised upward during the auction—both price and amount can be increased, but not decreased. Throughout the auction, Sonar continuously computes and publishes the estimated clearing price based on current bids, giving participants real-time visibility into where demand stands.

When the auction closes, the clearing price is determined by starting at the highest bid price and iterating downward in bid increment steps. At each step, the total USD committed at or above that price is calculated. The highest price at which combined commitments are sufficient to purchase all available tokens becomes the clearing price. Every successful bidder—regardless of what they originally bid—pays this single clearing price. Bidders whose maximum price fell below the clearing price receive no tokens and their USDC is returned in full.

If demand is strong enough that the clearing price would exceed the maximum bid price, all successful bidders pay the cap price and the sale is oversubscribed. In this case, tokens are allocated on a first-come, first-served basis: bids are filled in the order they were placed until the supply is exhausted. Bidders whose orders cannot be filled receive a full refund of uncommitted USDC. This rewards conviction and early participation—buyers who act decisively secure their allocation rather than competing for a pro-rata share after the fact.

Fig. 1: Bid Stack & Clearing Price



This means a participant who bids aggressively is not penalized for their conviction—they pay the same price as someone who bid just above the clearing threshold. The incentive is to bid your true valuation: underbidding risks missing the auction entirely, while overbidding carries no additional cost since everyone pays the same clearing price.

Fig. 2: What You Bid vs. What You Pay



All successful bidders pay the same clearing price.

6.1.2 Why an English Auction

This structure is chosen deliberately over alternatives. First-come, first-served sales reward speed over conviction and create gas wars that disadvantage smaller participants. Dutch auctions create price decay that punishes patience and rewards those who panic-buy early. Fixed-price sales require the seller to guess the market's valuation—inevitably leaving money on the table or pricing out genuine demand.

An English Auction eliminates these distortions. Because bids can only be revised upward, there is genuine competitive pressure toward price discovery. The live clearing price gives participants transparency into current demand, enabling informed decisions. And the uniform clearing price means everyone pays the same—eliminating “winner’s curse” anxiety and encouraging participants to bid their true maximum willingness to pay. The result is a fair expression of market demand: a price set not by the team, not by founding contributors, and not by whoever has the fastest bot, but by the equilibrium of what all participants collectively value.

Additionally, participants in the token sale who vouch their purchased tokens are eligible for a price guarantee: 85% at market-discovered prices, or 90% if the auction clears at or above

\$75M FDV (\$7.50 per token). This mechanism reduces downside risk for buyers who commit their tokens to the network. The price guarantee is described in detail in Section 8.

6.2 Timeline

Date	Event
September 1	Auction opens on Sonar
~September 4	Auction clears; uniform price determined
September 8	Token Generation Event (TGE); tokens distributed but locked; price guarantee registration opens
October 8	Price guarantee registration closes; 30-day lock expires; tokens become fully transferable

The 30-day lock between TGE and full transferability is intentional. During this period, token holders may vouch their tokens in other users—deploying them into the credibility graph—but cannot sell or transfer them on the open market. This ensures that the first activity in the token’s life is network participation, not trading.

7. XP-Weighted Bonus

A portion of the token supply—equal to 10% of the sale allocation (200,000 tokens, 2% of supply)—is distributed as bonus tokens to sale participants. The pool is split evenly: half (100,000 tokens, 1% of supply) funds the XP-weighted and validator bonuses described in this section, and half (100,000 tokens, 1% of supply) funds the referral bonus described in Section 7.5. None of it is an airdrop. Every bonus is available exclusively to users who participate in the sale, backed by capital committed in the auction. The XP-weighted bonus rewards users who have accumulated meaningful XP through genuine contribution, with a portion also allocated to wallets holding Ethos Validator NFTs, as described in Section 7.4.

7.1 Why Not an Airdrop

Direct airdrops—distributing tokens to users based solely on past activity—have a well-documented failure mode. Recipients who receive tokens for free tend to sell immediately. Industry data from 2025 shows that airdrop recipients sell 70–80% of received tokens within 24 hours. This creates concentrated sell pressure at the moment of distribution and rewards extraction over commitment.

The XP-weighted bonus inverts this dynamic. By requiring capital commitment as a prerequisite—you must participate in the sale to receive any bonus—the mechanism selects for users who are willing to put money behind their conviction. The bonus rewards their contribution history on top of that financial commitment.

7.2 The Formula

Each buyer’s bonus is determined by a pro-rata formula that weights both capital contribution and XP:

$$\text{bonus} = (\text{purchase} \times \text{XP}^{0.1}) / \text{total_weights} \times \text{pool_value}$$

Where **purchase** is the USDC amount the buyer commits in the sale, **XP** is their accumulated Ethos XP, and a participant's **weight** is their individual $\text{purchase} \times \text{XP}^{0.1}$. **total_weights** is the sum of all participants' weights, and **pool_value** is the total bonus pool (10% of the original sale volume). The 0.1 exponent means capital is the dominant factor while XP provides a meaningful but modest edge. A minimum XP threshold ensures that only users with genuine contribution history are eligible.

The table below illustrates a hypothetical sale with 6 different buyers of varying XP, purchase amounts, and XP bonus pool oversubscription rates:

Buyer	Purchase	XP	100% Fill	200% Fill	300% Fill
A	\$1,000	100K	+39%	+19%	+13%
B	\$1,000	10M	+61%	+31%	+20%
C	\$10,000	100K	+39%	+19%	+13%
D	\$10,000	10M	+61%	+31%	+20%
E	\$50,000	100K	+39%	+19%	+13%
F	\$50,000	10M	+61%	+31%	+20%

Notice that the bonus percentage is the same for buyers with equal XP regardless of purchase size, because both the numerator and denominator scale linearly with capital. The XP difference between 100K and 10M creates roughly a 1.6x advantage in bonus percentage, not a 100x advantage. Capital commitment is the primary driver; XP is a tiebreaker that rewards contribution history.

7.3 Self-Balancing Dynamics

The pro-rata structure is inherently self-balancing. Because the bonus pool is fixed and every participant's weight is divided by the total, increased participation naturally dilutes individual bonuses. If the sale is sparsely attended, early contributors receive larger bonuses—an appropriate reward for showing up when others did not. If the sale is heavily oversubscribed, bonuses shrink proportionally, and the bonus becomes a modest kicker rather than a windfall.

This self-correction eliminates the need for caps, tiers, or manual intervention. The market clears the bonus allocation the same way the auction clears the token price.

7.4 Validator Holder Bonus

In addition to the XP-weighted bonus, wallets that hold Ethos Validator NFTs and participate in the sale receive a base bonus allocation of \$WHUF. The bonus is based on holding the validator itself: a maximum bonus amount is allocated per validator held, with holdings measured at a previous snapshot taken within the last 30 days.

Like the XP-weighted bonus, the validator bonus is not an airdrop: sale participation is a prerequisite, and bonus allocations are backed by capital committed in the auction. The validator bonus draws from the same bonus pool as the XP-weighted bonus, and the per-validator amount scales down proportionally as total claims

on the pool grow—the same self-balancing dynamic described in Section 7.3. The exact calculation methodology is not published.

Validator bonus tokens are distributed at TGE and follow the same unlock terms as sale tokens.

7.5 Referral Bonus

Half of the bonus pool (100,000 tokens, 1% of supply) is reserved for referral bonuses. Sale participants who refer new bidders receive a bonus proportional to the referred participant's settled purchase, paid in \$WHUF at the clearing price. The bonus rate is determined by the referred participant's Ethos score at auction close: scores below 1,300 earn no bonus, and rates scale continuously from 3% at 1,300 up to 10% for scores of 2,000 and above. Rates taper on very large referred purchases, so a single large bid cannot claim a disproportionate share of the pool. Referring credible participants pays more—by design.

Bonuses are paid only where both the referrer's and the referred participant's bids clear at the final price. Refunded bids generate no referral bonus in either direction: a referrer whose own bid does not clear earns nothing, and a referred bid that does not clear produces nothing for its referrer. Referrals are single-layer—there are no multi-level chains—and if total claims exceed the pool, all bonuses scale down proportionally. Like the XP-weighted bonus, this is not an airdrop: every bonus is backed by capital committed in the auction. Referral bonus tokens are distributed at TGE and follow the same unlock terms as sale tokens.

8. Vouching and the Price Guarantee

Participants in the token sale who vouch their purchased tokens in other Ethos users are eligible for a price guarantee, redeemable within 12 months of the token unlock date (October 8, 2026—30 days after the September 8 TGE, not the TGE date itself). The guarantee covers 85% of the original purchase price. If the auction clears at or above \$75M FDV (\$7.50 per token), the guarantee increases to 90%. The maximum price cap is \$99M FDV (\$9.90 per token). Redemption is subject to KYC/AML verification as described in Section 8.5.

8.1 Mechanism

The guarantee operates as follows. A buyer purchases tokens in the sale. At TGE, tokens are distributed but locked—they cannot be sold or transferred. During the 30-day lock period, a price guarantee registration window opens. Buyers who wish to participate opt-in to the guarantee by vouching some or all of their locked tokens in other Ethos users. While those tokens remain vouched, the buyer is eligible to redeem the guaranteed percentage (85%, or 90% if the auction cleared at or above \$75M FDV) of their original purchase price for the vouched portion at any point within 12 months of the unlock date (October 8, 2026).

The purpose is straightforward: get tokens into the credibility graph immediately. Vouching is the core mechanism of the Ethos protocol—without it, the network produces no signal. The guarantee reduces the downside risk for buyers who make an early

commitment, bootstrapping the credibility graph.

The timing of the guarantee creates an additional layer of buyer protection. Because the 12-month redemption window begins at the token unlock date—30 days after TGE—the guarantee does not expire until 13 months after Token Generation. Team and advisor tokens, by contrast, begin unlocking at TGE + 12 months (the 1-year cliff). This means the price guarantee remains active through the first month of team token unlocks—the period when insider supply could first begin to enter the market. Sale participants are protected not only during the initial lock period, but through the most critical supply transition in the token’s early lifecycle.

8.2 Forfeit on Unvouch

The guarantee is contingent on maintaining the vouch and the Original Wallet Address. If a buyer unvouches their tokens—for any reason, at any time—the guarantee on those tokens is immediately and permanently forfeited. There is no grace period, no partial credit, and no mechanism to reinstate eligibility once a vouch is withdrawn or slashed.

The same applies to partial decreases. If a buyer reduces the amount of a vouch, the decreased amount is permanently forfeited from the guarantee—only tokens that remain continuously vouched stay covered. Redemption must also be requested for the full amount of a vouch, not a partial amount: a buyer cannot redeem part of a vouch while keeping the remainder vouched and covered.

This design creates a clean binary: either your tokens are vouched and protected, or they are unvouched and unprotected. The instant forfeit eliminates gaming strategies where users might rapidly cycle between vouched and unvouched states. It also provides a strong incentive to maintain vouches—exactly the behavior the network needs.

Crucially, vouches cannot be transferred from one user to another. If a buyer vouches their tokens in someone who later proves untrustworthy, the buyer faces a genuine dilemma: maintain the vouch in someone they no longer trust in order to preserve the guarantee, or unvouch to protect the integrity of their credibility graph and permanently forfeit the price protection. There is no option to simply redirect the vouch to a different user.

This is intentional. The guarantee is designed to reward thoughtful vouching, not indiscriminate staking. The non-transferability ensures that choosing who to vouch is a consequential decision—one that carries real risk and therefore produces real signal.

8.3 Forfeit Due to Slash

Vouch balances can be reduced by a fixed percentage as the result of a slash penalty. If a token sale participant is slashed, any \$WHUF lost to a slash is permanently forfeited from the price guarantee.

The guarantee protects against market risk, not reputation risk—participants who act dishonestly or carelessly within the

network bear real financial consequences regardless of the price protection they registered for.

8.4 Profiles Are Required

The price guarantee requires vouching, and vouching requires an Ethos profile. Participants should bid from a wallet that is already connected to their Ethos profile. If a participant bids from a wallet that is not connected to a profile, they will need to add that wallet to their profile after the sale in order to vouch from it. Once tokens are delivered they are locked and non-transferable during the guarantee period. Tokens cannot be moved to a different wallet.

All wallet addresses that participate in the sale will automatically receive Ethos profile invites, ensuring that every buyer has the ability to create a profile, vouch their tokens, and qualify for the guarantee regardless of whether they had a profile before the sale.

8.5 Redemption

In order to redeem tokens for the guaranteed price, they must remain vouched—any unvouching permanently disqualifies the unvouched tokens from the guarantee. To initiate a redemption, buyers submit a request to redemptions@ethos-foundation.org. The Ethos Foundation will manually guide each participant through the process.

Users can only request redemption from the Original Wallet Address (the wallet used to purchase tokens in the sale); tokens lost due to lost, drained, or compromised wallets are no longer eligible.

Redemption requires full Know Your Customer (KYC) identity verification and Anti-Money Laundering (AML) screening to ensure compliance with applicable regulations. Participants should expect this process to take time, as it requires the Foundation to manually verify each individual’s identity and complete AML checks before any redemption can be processed.

Redemptions will be paid in USDC on Base to the Original Wallet Address. No exceptions may be made to this requirement. This constraint exists to limit the Foundation’s legal liability, comply with all applicable legal requirements, and ensure a clear, auditable chain of custody between the original purchase and the redemption.

Redemptions are paid within 30 days of the redemption request. This window covers the KYC/AML verification described above and the processing of the USDC payment to the Original Wallet Address.

The 12-month redemption window begins at the token unlock date (October 8, 2026). After 12 months, the guarantee expires for all participants regardless of vouch status.

The guarantee covers 85% of the original purchase price, not 100%. If the auction clears at or above \$75M FDV (\$7.50 per token), the guarantee increases to 90%. The maximum price cap is \$99M FDV (\$9.90 per token). The gap between the guarantee and full coverage is deliberate: it ensures that the guarantee is not risk-free. A portion of the remaining amount covers fees paid to the token sale platform, and the remainder ensures that buyers still bear

meaningful downside, bounding it in exchange for committing their tokens to the network. The enhanced rate at the \$75M threshold reflects that buyers who purchase at higher valuations have less price-discovery upside from the auction, so the protocol offers stronger downside protection in return.

9. Vouching with \$WHUF

The transition from ETH to \$WHUF as the vouching asset changes the economic relationships within the credibility graph.

Today, when a user vouches ETH for another user, the financial stake represents trust—but the underlying asset is indifferent to the network. Ethereum’s price moves on its own fundamentals. A vouch of 1 ETH could double in dollar terms because of Ethereum L2 adoption, or halve because of broader market conditions, in ways that have nothing to do with whether the vouched user is trustworthy.

With \$WHUF, the vouching asset and the network are the same thing. A vouch of 1,000 \$WHUF in a trusted collaborator is simultaneously a statement of trust in that individual and a commitment to the network that facilitates that trust. The voucher’s economic position improves when the network they are contributing to grows and functions well.

Core vouching mechanics carry over: mutual vouches still amplify credibility, unvouching still signals potential distrust, and slashing still carries financial consequences proportional to staked amount. The transition removes vouch fees and replaces the legacy voucher reward system with the contributor rewards pool, simplifying the fee structure while maintaining the protocol’s game-theoretic properties.

9.1 Network Rewards for Vouching

The continuous decay model produces a reward curve that front-loads incentives when the network most needs participation, then tapers smoothly. Early vouchers receive meaningful rewards for bootstrapping the credibility graph. As the remaining pool shrinks, the emission rate decreases automatically, reflecting the expectation that a maturing network requires less external incentive as organic utility takes over. Because the decay is asymptotic, emissions never fully cease but diminish to negligible levels over time.

Actual per-participant distributions depend on how many tokens are actively committed through vouching and market activity at any given time. If network participation grows faster than expected, individual distributions compress. If participation is slower, distributions may exceed initial estimates. The emission math is executed on-chain by the EthosRewards contract, and all accruals, claims, and rate changes are recorded as events on Base—providing full transparency for participants.

10. The Ethos Score

Ethos scores are an offchain abstraction of the underlying smart contract data. The onchain inputs—such as vouches, reviews,

slashing events, and attestations—are public and permissionless. Any third party can read this data and build their own scoring model on top of it. The protocol does not privilege any single scoring algorithm.

The front end at app.ethos.network, operated by Ethos Labs, provides one interpretation of this data. Other third parties may equally read the same onchain reputation graph and create their own scoring algorithms on top of it — the Ethos score is one lens on the data, not the data itself. The underlying smart contract data remains accessible regardless of which interpretation a user chooses.

10.1 Changes to Vouch Scoring with \$WHUF

The transition to \$WHUF changes how vouched value is incorporated into the Ethos score. With ETH vouching, scores are calculated using a sigmoid curve: vouching more ETH increases your score up to a ceiling, with diminishing returns beyond a threshold.

\$WHUF vouching will use a distribution-based scoring model. Rather than mapping vouched value to score through a fixed curve, the score contribution from vouching is determined by a user’s standing among all vouchers: those with the most \$WHUF vouched receive the highest contribution, scaling down from there. We chose this model because it makes the credibility signal independent of market movement — whatever the token price does, the ranking is unaffected, so scores stay stable. The signal comes from relative commitment, not absolute dollar value.

10.2 The Transition from ETH Vouching

The transition to \$WHUF vouching does not reset scores or unwind existing positions. Ethos scores carry through the transition intact: reviews, attestations, vouch history, slashing events, and every other input to the score persist, and existing ETH vouches continue to be considered in the Ethos credibility score after \$WHUF vouching goes live.

As part of the transition, the Ethos application provides an exchange flow that lets a voucher convert an existing ETH vouch into a \$WHUF vouch, retaining the vouch’s standing and its contribution to the score. Conversion is initiated by the voucher; no one’s staked ETH is moved, converted, or removed without their action.

11. Conclusion

\$WHUF introduces a native economic layer to a reputation network that has already demonstrated the value of financially-backed trust. The token does not change the core thesis of Ethos—that credibility should be earned through social proof and skin in the game. It deepens that thesis by denominating the economic commitments in an asset whose value is endogenous to the network.

The sale structure prioritizes fairness through a uniform-price English Auction. The XP-weighted bonus rewards contribution

history without the extractive dynamics of airdrops. The price guarantee incentivizes immediate network participation through vouching. And the deliberately low venture capital exposure ensures that the token's distribution reflects the community that built the protocol.

This paper describes the system as it exists and the mechanisms as they are designed. Parameters may change. Some mechanisms may prove more effective than others. We commit to the same transparency and intellectual honesty that have characterized the Ethos protocol from its inception.