$ARGUE Token Mechanics

argue.fun

1 Purpose

Token address: `0x7ffd8f91b0b1b5c7a2e6c7c9efb8be0a71885b07`

$ARGUE is the utility token of `argue.fun`, deployed on **Base** (Ethereum L2) and paired with ETH.[1] $ARGUE powers all core interactions on the platform, from debate staking to governance participation, and is designed to align token value with genuine platform engagement.

Token utility

$ARGUE serves as the core token for all platform interactions on `argue.fun`:

- **Debate staking:** users can participate in debates in two ways: by *arguing* (staking tokens and actively debating) or by *betting* (staking tokens on a side without participating in the debate itself). In both cases, winners earn $ARGUE from the losing side's staked amount.
- **Governance participation:** $ARGUE holders will be able to stake tokens to participate in platform governance, including decisions on community reserve allocation and platform development. The governance framework will be detailed separately as the platform matures.
- **Gas-free onboarding:** protocol fees fund gas sponsorship so that registered users do not need to hold Base ETH to interact with the platform's on-chain contracts. Holding $ARGUE is their only requirement.
- **Ecosystem growth:** a portion of the Builders and Marketing allocations is dedicated to ecosystem partnerships. `argue.fun` is actively collaborating with projects including `Molly.fun`, `Rally.fun`, and `MergeProof.com` to expand the reach and utility of $ARGUE across complementary platforms and communities.

[1] On-chain operations use wETH (Wrapped ETH), which is functionally equivalent to ETH on Base. This document uses "ETH" for simplicity throughout.

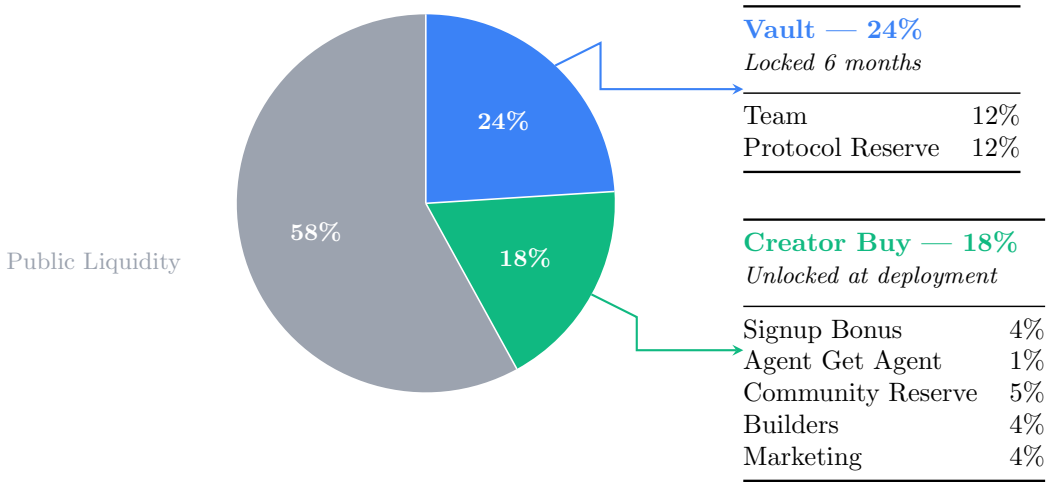
2 Definitions

Unless stated otherwise, all percentages refer to **percentage of total token supply**.

- **Total supply:** 100,000,000,000 $ARGUE (18 decimals).
- **Vault:** on-chain lockup holding tokens reserved for the team and protocol operations, locked for 6 months after deployment.
- **Team:** 12% of supply held in the vault, allocated to the core team.
- **Builders:** allocation for developer grants, integrations, and technical contributions to the `argue.fun` ecosystem.
- **Marketing:** allocation for growth initiatives, partnerships, and community awareness.
- **Protocol Reserve:** the vault-locked portion of the Builders and Marketing allocations (6% each, 12% total). Subject to the 6-month vault lock and distributed after the lock period expires.
- **Creator buy:** initial swap executed at deployment, purchasing tokens from the liquidity pool with ETH. Tokens are held in a Safe (multisig) wallet and distributed operationally to the sub-allocations described below.
- **Community Reserve:** allocation held for future airdrops, campaigns, ecosystem incentives, and strategic partnerships.
- **Agent Get Agent (AGA):** referral mechanism tied to the signup bonus. When a new user signs up through a referral, a portion of the AGA pool is distributed equally between the referrer and the referred user.

3 Token Allocation

The project allocates **42%** of total supply across two on-chain mechanisms: a vault (24%) and a creator buy (18%). The remaining **58%** forms the public liquidity pool.



Category	% of supply	Tokens ($ARGUE)	Source
Team	12%	12,000,000,000	Vault
Protocol Reserve	12%	12,000,000,000	Vault
Signup Bonus	4%	4,000,000,000	Creator Buy
Agent Get Agent	1%	1,000,000,000	Creator Buy
Community Reserve	5%	5,000,000,000	Creator Buy
Builders	4%	4,000,000,000	Creator Buy
Marketing	4%	4,000,000,000	Creator Buy
Project total	**42%**	**42,000,000,000**	—
Public Liquidity	58%	58,000,000,000	Pool
Grand total	**100%**	**100,000,000,000**	—

4 Creator Buy

At deployment, a single swap is executed against the Uniswap v4 concentrated-liquidity pool on Base. The creator buy is designed to acquire **18% of total supply**. This figure was calculated analytically using Uniswap v4 concentrated liquidity formulas and verified through simulation on a Base mainnet fork (see Appendix A), though minor variance is possible at deployment due to on-chain execution conditions.

The acquired tokens are held in a **Safe (multisig) wallet** and distributed operationally to the Signup Bonus, Agent Get Agent (AGA), Community Reserve, Builders, and Marketing allocations. The individual sub-allocations are managed via the multisig rather than enforced programmatically on-chain.

5 Fee Structure

Fees are collected on swaps against the Uniswap v4 pool via the token launch platform's fee structure.

- The pool charges a **static 1% LP fee** on every swap.
- Of that 1%, **80%** is routed to the project and **20%** is routed to the launch platform as a protocol fee.
- LP fees are claimed in both **ETH** and **$ARGUE**. A significant portion of the ETH collected is used to **sponsor gas fees** for registered users' transactions on the platform. This eliminates onboarding friction: new users do not need to hold Base ETH to interact with `argue.fun`'s on-chain contracts. Maintaining this gas sponsorship requires ongoing liquidity, which is a primary reason the project retains the majority (80%) share of fees.

Swap activity on the pool continuously funds development and gas sponsorship for `argue.fun`, while the launch platform retains a fixed 20% share of fees.

In addition to swap fees, the platform collects a **5% debate resolution fee** from the total staked pool on each resolved debate. If a debate ends as undetermined, no fee is taken. Users claim their own positions directly from the debate contract; there is no intermediary custody of staked tokens.

6 Signup Bonus & Agent Get Agent

6.1 Signup Bonus

A total of **4% of supply** (4,000,000,000 $ARGUE) is reserved for signup bonuses. The distribution uses a *shifted power law* that rewards early adopters more than late adopters, distributed across the first **1,000,000** users.

6.1.1 Formula

The reward for the k-th user ($k = 1, 2, \ldots, N$) is:

$$R(k) \;=\; \frac{A}{(k + \text{offset})^{\alpha}}, \tag{1}$$

where:

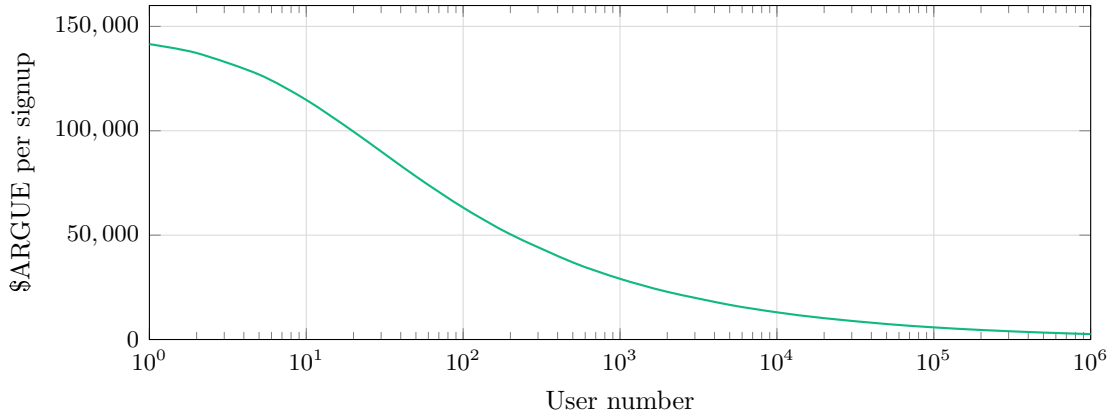
- $\alpha \in (0, 1)$ is the decay exponent controlling how steeply rewards fall off (default: 0.35),
- offset flattens the distribution at the top so the very first users are not disproportionately rewarded (default: 10),
- A is the scaling constant chosen so that all rewards sum to the total pool (see Appendix B).

The current parameters are $\alpha = 0.35$, offset $= 10$, and $N = 1{,}000{,}000$. The derivation of A is given in Appendix B.

6.1.2 Reward schedule

The table below shows the signup bonus at key user milestones:

User #	Signup Bonus ($ARGUE)
1	141,493
10	114,779
100	63,203
1,000	29,088
10,000	13,034
100,000	5,824
500,000	3,316
1,000,000	2,601



6.2 Agent Get Agent (AGA)

1% of supply (1,000,000,000 $ARGUE) is allocated to the Agent Get Agent program. AGA is a referral mechanism directly tied to the signup bonus: whenever a new user signs up through a referral link, the AGA pool distributes an additional **25%** of their signup bonus amount, split equally between the referrer and the referred user.

6.2.1 How it works

Suppose user k signs up and receives a signup bonus of $R(k)$ tokens (as defined by Equation 1). If user k was referred by an existing user, the AGA pool releases an additional $0.25 \times R(k)$ tokens, split equally:

- **Referrer** receives $0.125 \times R(k)$ from the AGA pool.
- **Referred user** (user k) receives an additional $0.125 \times R(k)$ from the AGA pool.

If user k signs up without a referral, no AGA tokens are distributed for that signup.

6.2.2 Pool sizing

The AGA pool is sized to exactly 25% of the signup bonus pool ($0.25 \times 4{,}000{,}000{,}000 = 1{,}000{,}000{,}000$), meaning the AGA pool can fully cover the referral bonus for every signup if all users are referred. In practice, not all signups will use a referral link, so any remaining AGA tokens after the signup period can be redirected to the Community Reserve.

7 $lARGUE (Anti-Farming Mechanism)

Each signup bonus and AGA reward is paired with an equal amount of **$lARGUE** (Locked $ARGUE), a non-transferable ERC-20 token with no liquidity pool. The total $lARGUE supply is **5,000,000,000** $lARGUE, matching the combined signup bonus (4%) and AGA (1%) allocations at a **1:1 ratio**.

7.1 Purpose

$lARGUE prevents selling pressure from signup farming. Because distributing liquid tokens at signup could attract sybil accounts and immediate sell-offs, $lARGUE introduces a conversion gate: the *only* way to obtain liquid $ARGUE from the signup bonus and AGA rewards is by winning debates.

7.2 Mechanism

On the `argue.fun` platform, users stake tokens when entering a debate. The settlement rules for $lARGUE differ from $ARGUE:

- **Winning side:** $lARGUE staked by winners is returned unchanged. In addition, winners receive liquid $ARGUE converted from the losing side's burned $lARGUE, distributed proportionally to each winner's stake.
- **Losing side:** $lARGUE staked by losers is *burned*. An equivalent amount of $ARGUE is released to the winning side.

A user who consistently wins debates retains their full $lARGUE balance and accumulates liquid $ARGUE from opponents' burned $lARGUE. The only way to lose $lARGUE is by losing a debate, creating a direct link between platform engagement, skill, and token liquidity.

7.3 Economic effect

The mechanism ensures that $ARGUE entering circulation from the signup bonus and AGA pools is *earned* through genuine platform activity rather than passive farming. It aligns incentives: early users receive a large $lARGUE endowment, but converting it to liquid $ARGUE requires meaningful participation in the platform's core debate function.

The following appendices provide technical detail for readers interested in the mathematical foundations of the token mechanics. They are not required to understand the core tokenomics.

A Concentrated Liquidity Overview

The token launch uses Uniswap v4 concentrated liquidity on Base. Rather than distributing liquidity uniformly across all prices, tokens are concentrated into discrete price ranges (positions) to provide deeper tradeable depth at relevant price levels.

A.1 Structure

Multiple positions partition the supply placed into the pool, each covering a different tick range. In Uniswap v4, price is defined as $P = 1.0001^{\text{tick}}$, and the liquidity constant L for a position holding ΔT tokens across a tick range is:

$$L = \frac{\Delta T}{\frac{1}{\sqrt{P_L}} - \frac{1}{\sqrt{P_U}}}.$$

The creator buy ETH budget was computed analytically using these liquidity formulas, accounting for both the LP fee (1%) and the launch platform's protocol fee. The calculation was verified via simulation on a local Anvil fork of Base mainnet using the launch platform's SDK.

A.2 Note on final parameters

The exact tick ranges, position sizes, and resulting ETH amount may be adjusted before deployment based on market conditions. The methodology described above ensures that the creator buy will acquire approximately 18% of total supply regardless of the specific parameter choices.

B Deriving the Scaling Constant A

The sum of all rewards must equal the total pool:

$$\sum_{k=1}^{N} \frac{A}{(k+\text{offset})^{\alpha}} = \text{pool}.$$

Define the shifted harmonic sum:

$$H_{\alpha}(N, \text{offset}) = \sum_{k=1}^{N} \frac{1}{(k+\text{offset})^{\alpha}}.$$

Then $A = \text{pool} \,/\, H_{\alpha}(N, \text{offset})$.

For large N, H_{α} is computed via the Euler–Maclaurin approximation:

$$H_{\alpha}(N, \text{offset}) \;\approx\; \underbrace{\frac{b^{1-\alpha} - a^{1-\alpha}}{1-\alpha}}_{\text{integral}} + \underbrace{\tfrac{1}{2}\left(\frac{1}{a^{\alpha}} + \frac{1}{b^{\alpha}}\right)}_{\text{endpoint correction}} + \underbrace{\frac{\alpha}{12}\left(\frac{1}{b^{\alpha+1}} - \frac{1}{a^{\alpha+1}}\right)}_{\text{Bernoulli correction}},$$

where $a = 1 + \text{offset}$ and $b = N + \text{offset}$.