

ADBYTES Whitepaper

The economics of a tokenized advertising network

Adbytes.Media | Version 1.0

Tokenization with an economic purpose

A token can give an application a transferable unit of value, a way to reward participation, and a market beyond its own walls. Whether those capabilities produce a durable economy depends on how they are used. Rewards can attract activity without creating lasting demand; generous yields can spend reserves faster than a business can replenish them. The design challenge is to make participation valuable to someone who is willing to pay for it.

Adbytes approaches this challenge as a practical tokenization experiment. A crypto-focused advertising network and media platform offers a strong setting: publishers supply inventory, audiences contribute attention, and advertisers seek measurable outcomes. Participants can earn tokens by supplying something the platform needs, then use those tokens to purchase the services that activity makes possible.

The economic proposition

ADBYTES combines scheduled rewards for useful contributions with permanent burning of tokens redeemed for Platform Credit. Publishers compete for a share of a token pool, independently of what an advertiser pays. Redemption connects demand for advertising services to irreversible supply reduction. Staking provides a further incentive to hold, with the potential for revenue-funded rewards and participation in governance.

The objective is a profitable platform, positive advertiser returns, and sustainable publisher earnings. These outcomes depend on traffic quality, recurring service demand, and disciplined management of cash and token reserves. The model is an experiment in aligning those interests through a functioning service economy.

Solving the coordination problem

Publishers need compensation before an advertising network has substantial demand; advertisers need useful inventory before committing budgets. A finite token reserve can support early contributions while both sides develop. Separating the base reward budget from advertising receipts also permits discounted campaigns and promotional credit without reducing the scheduled token pool.

This flexibility carries a cost: publishers accept market risk, and the platform commits reserves and service capacity. The economic test is whether those commitments establish recurring demand sufficient to support the network as reliance on reserves declines.

Scope

ADBYTES is an ERC-20 on Base; the advertising platform is centrally operated. The contract enforces the supply limit. Allocations, redemption terms, and the commitment to burn redeemed tokens are operating policies. Numerical examples describe adjustable starting parameters, not optimized constants or permanent rates.

Reward allocation and participation

A bounded reward pool

Let R be the ADBYTES assigned to one publisher reward period. For publisher i , let I_i and C_i denote eligible unique impressions and clicks, and let a and b be their respective scoring weights. The publisher receives a proportional share of R whenever the total eligible score is positive.

$$s_i = a \times I_i + b \times C_i$$

$$r_i = R \times s_i / S \quad \text{where } S = \text{sum of publisher scores}$$

For example, $R = 222$, $a = 1$, and $b = 200$. A publisher with 10,000 eligible impressions and 50 eligible clicks has 20,000 points. If the network total is 100,000 points, its reward is 44.4 ADBYTES. A 10-minute interval produces 144 scheduled periods and 31,968 tokens per day, assuming eligible activity and successful processing in each period. No eligible score means no distribution for that period.

Rewards use newly recorded eligible traffic, so processing delays can move events into a later period. Rounding aside, total rewards are bounded by R regardless of participation.

The economics of an individual publisher

Let P represent a market price per token. The indicative market value of a publisher's period reward is $P \times r_i$. Actual sale proceeds may differ because of liquidity, fees, or price movement. If the publisher redeems instead, its benefit depends on the usefulness of the services obtained, not simply their nominal credit amount.

Participation is attractive when expected benefits exceed the incremental and opportunity costs of supplying inventory. Those costs differ: some publishers already operate a site, while others invest specifically in content, audience growth, or promotion. Publishers consequently face different thresholds for worthwhile participation.

Contribution rather than advertiser receipts

The base pool is independent of campaign bids and direct advertising receipts. It can support publishers while campaigns are discounted or demand is weak, provided eligible traffic is recorded. Dollar earnings remain variable because both P and the publisher's share of S can change.

Paid-to-click (PTC) participation rewards users for viewing sponsored websites. Other qualifying actions can support additional rewards, with each program tied to a useful contribution and a budget within the platform allocation. Unlike the bounded publisher pool, per-action incentives can grow with activity and require separate caps or more frequent budget review.

The analogy to Bitcoin mining

Competition for a shared reward

The useful parallel with Bitcoin mining is proportional competition. A miner's share of aggregate computing power influences its expected share of mining rewards; pooled mining makes contribution-based sharing more explicit. Adbytes applies a related allocation idea to eligible traffic. Publishers commit resources to obtain a share of a common reward budget. [1]

Increasing traffic faster than the network as a whole increases a publisher's share. If all publishers expand proportionally, their shares remain unchanged: inventory grows while the token reward per unit of traffic falls.

Indicative reward value per score point = $P \times R / S$

This expression isolates three forces: token price P , the period budget R , and total eligible score S . Holding the other terms constant, higher P increases the value of participating; higher S reduces reward value per point; and higher R raises token compensation while consuming reserves faster.

Entry and exit as feedback

If P rises while R and S are unchanged, publisher compensation becomes more attractive. New participation or increased contribution may then raise S , spreading the pool more widely. If P falls or S grows faster than reward value, lower earnings may cause some publishers to reduce participation or leave. Their exit increases the remaining participants' proportional shares.

This feedback can moderate returns, but it does not establish a stable equilibrium by itself. Audience development takes time, switching costs differ, and publishers may value redemption differently. Increasing R in response to weak earnings can support participation while also increasing the quantity of tokens recipients may sell. Emission changes must therefore consider demand and liquidity as well as publisher retention.

Where the analogy ends

Bitcoin mining uses proof of work to support blockchain consensus; its block rewards include issuance and transaction fees. Adbytes traffic rewards distribute existing tokens and do not validate Base transactions. Its reward periods are application accounting intervals. Proportional publisher payments are closer to a pool allocation than to the uncertain outcome of an individual mining attempt. [1]

Advertising inventory must be useful to buyers, and traffic quality cannot be established by a cryptographic work test alone. Adbytes relies on traffic validation and administrative judgment. The analogy does not imply equivalent decentralization or security.

Redemption and permanent burning

Service demand becomes a permanent token sink

Platform Credit is a USD-denominated service balance used for banner campaigns, PTC campaigns, directory placements, and sponsored guest articles where enabled. It cannot be withdrawn as cash or cryptocurrency. ADBYTES serves a different purpose: it lets publishers transfer or sell compensation, lets advertisers acquire tokens independently, and enables staking and permanent burns. Transferable tokens connect participants through a market; credit provides a stable unit for pricing and purchasing services.

Earn or buy ADBYTES → Redeem → Platform Credit for services + tokens reserved for permanent burning

A publisher can redeem earnings to promote its own project; an advertiser can buy tokens to acquire services at favorable terms. Campaigns can be funded entirely through redemption, subject to normal approval and delivery rules. Both wallet tokens and unwithdrawn rewards are earmarked for burning when converted into credit. Periodic on-chain burns complete the removal, independently of when that credit is spent.

The service economy continues while redeemed tokens leave permanently. Burning prevents the platform from reselling or redistributing those tokens into future supply available to buyers. Earned-token redemption avoids a potential market sale; buying to redeem creates purchase demand. Both routes connect token use to an actual service.

The redemption premium

Let v be the Platform Credit granted per token and P the acquisition price per token. Ignoring fees and slippage, acquiring tokens for a campaign with credit cost A requires A / v tokens and costs $A \times P / v$. The nominal discount relative to paying A directly is therefore:

Nominal discount = $1 - P / v$ when $v > P$

For example, $v = \$0.005$ and $P = \$0.001$ lets 20,000 tokens purchased for \$20 obtain \$100 of credit: an 80% nominal discount before costs. A generous starting rate is intended to make redemption compelling while adoption develops.

A possible later policy is $v = (1 + m) \times P_{avg}$, using an average market price and a chosen premium. A 20% premium implies a 16.7% nominal discount at P_{avg} . This is not an implemented automatic rule; liquidity, manipulation resistance, averaging, and transaction costs would affect its design.

Credit value depends on available inventory

Services must be worth buying: generous credit does not guarantee conversions or create a cash-price floor. Advertisers may still pay directly for convenience or trust. Competitive value depends on inventory, delivery transparency, pricing, and product quality.

Competing bids for clicks (CPC), impressions (CPM), or daily placements (CPD) can raise the price of limited inventory, absorbing some redemption advantage. More publishers expand capacity. The token exchange rate alone cannot determine the cost per useful advertising outcome.

Burn economics and supply discipline

Token properties and allocation

The contract fixes the initial supply at one billion tokens with 18 decimals. It supports transfers and burns, with no subsequent minting or pause function. The owner can change the name, symbol, and metadata URL. The following allocation policy divides the initial supply; it does not establish contractual vesting or describe circulating balances.

Purpose	Share	ADBYTES
Platform rewards	50%	500,000,000
Token sales and liquidity	20%	200,000,000
Staking and yield farming	15%	150,000,000
Platform and team	10%	100,000,000
Promotions and giveaways	5%	50,000,000
Total initial allocation	100%	1,000,000,000

The 500 million platform-rewards budget covers publishers, PTC, loyalty, referrals, and other qualifying incentives. Each new program draws on this shared allocation unless funded replenishment offsets it.

How service demand reduces supply

At a given rate: tokens committed to burn = redemption credit issued / credit per token

At a fixed rate, greater redemption volume commits more tokens to destruction. Across changing rates, total commitments equal the sum of tokens actually redeemed. Raising credit per token strengthens the purchasing incentive but removes fewer tokens for a given credit amount. The policy balances adoption, service capacity, and burn volume; growth increases burns through greater token redemption.

Total token supply = 1,000,000,000 – cumulative on-chain burns

Burns accumulate irreversibly because the contract cannot mint replacements. An unchanged holding represents a larger fraction of the remaining supply. Persistent service demand is what can make that increasing scarcity economically meaningful; a smaller supply alone does not ensure a higher market price.

Reward distributions move existing tokens; staking temporarily changes availability. Neither reduces total supply. Circulating supply can still rise while total supply falls if treasury releases exceed removals from circulation. Internal rewards and pending burns are separate reserve obligations and must both be excluded from spendable reserves.

A practical reserve horizon

Reserve runway = uncommitted reward reserve / net daily reserve use

Net use is new reward commitments across all programs less funded replenishment, such as market purchases. Settling an already reserved reward or burn obligation does not consume the uncommitted balance twice. This ratio assumes positive, reasonably stable net use; a bounded publisher schedule alone does not cap total platform emissions.

Staking and participant choices

A funded incentive to retain tokens

A recipient can redeem tokens for services, sell, hold, or stake for additional rewards. Staking gives participants who do not need advertising a reason to retain tokens and can attract buyers beyond the publisher and advertiser base. Its purpose is to reward longer participation and reduce immediate selling.

Users deposit ADBYTES and receive stADBYTES receipt tokens at a 1:1 ratio. The receipt represents deposited principal. Active stakes share a separately funded reward treasury, and users can harvest or restake rewards. This is an application reward program, not payment for securing Base consensus.

$$\text{Participant daily reward} = E_s \times x_i / X$$

Here E_s is the daily staking reward budget, x_i the participant's active stake, and X the total active stake. At constant values, the simple annualized token reward rate is $365 \times E_s / X$. It excludes compounding, token price changes, fees, and periods without sufficient funding. A larger total stake dilutes the reward rate for each token staked.

Withdrawal timing and liquidity

A sample configuration uses a 24-hour cooldown followed by a 48-hour completion window. The requested stADBYTES enters escrow and stops earning rewards until withdrawn or returned. If the window expires, the user selects Return to Wallet to recover the stADBYTES receipt tokens. Withdrawing the underlying ADBYTES then requires a new request and cooldown. Timing parameters are adjustable within contract limits.

Cooldowns defer access to principal rather than removing future selling pressure. Withdrawn principal and harvested rewards can be sold, and transferable receipt tokens can change ownership while underlying tokens remain deposited. The market effect depends on new staking demand, reward sales, withdrawals, and liquidity.

The source of staking returns

Rewards come from finite reserves or purchased tokens. The contract separates reward funds from principal backing. Its administrator can adjust reward and timing parameters and withdraw treasury funds without consuming staked principal. Reward payment depends on sufficient treasury funding.

Staking could become a channel for sharing platform profits: after covering operating needs, a portion of the surplus could buy ADBYTES on the market and fund staking distributions. This would connect returns to service demand and create purchase demand without new issuance. Such tokens would remain in circulation after distribution, unlike redemption burns. Funding and payout policy would need to be defined; staking presently grants no automatic claim on profits.

Staked balances could also provide voting weight for on-chain governance over selected budgets or economic parameters. Any such system would need explicit voting and execution rules, safeguards against concentrated control, and clear limits on which decisions token holders can make.

Service quality and economic sustainability

Rewarding what advertisers value

Clicks and impressions are proxies for advertising value, not conversions. Even valid human traffic can be commercially unsuitable. Advertisers need useful outcomes at an acceptable acquisition cost.

Quality assessment could combine advertiser-reported conversions through pixels or APIs with controlled platform campaigns. Conversion-weighted rewards would require fair treatment of attribution errors, different offers, missing reports, and selective reporting. They are not part of the present reward formula. Traffic validation and fraud controls remain essential: rewards must favor useful contributions over manufactured activity.

Balancing token demand with operating cash

Advertiser outcomes must justify campaign costs, publisher benefits must justify supplying inventory, and the platform must cover delivery and operating costs. Token demand supports the first two only when it is connected to useful services; it does not automatically finance the third.

Operating cash surplus = service cash receipts – operating cash costs

Redemption brings no new cash at conversion. When an advertiser buys tokens from another holder, that payment goes to the seller. Redemption supports token utility and permanent burns, but also commits the platform to deliver services. The objective is therefore to grow redemption alongside sufficient cash receipts and delivery capacity, rather than maximize burns regardless of operating needs.

Direct service payments supply operating cash. Treasury sales can raise additional funds, but draw on finite assets and compete with other holders' selling. They are financing and are excluded from the operating cash measure above, which is distinct from accounting profit.

From reserve incentives to service funded participation

As demand develops, lower emissions can extend reserve life, and service revenue can finance market purchases for future rewards. Verified publishers could receive direct revenue shares or negotiated payments, with base token rewards remaining available as a participation layer. These approaches offer a path from reserve-funded adoption toward compensation supported by the services the network delivers.

Burning does not replenish reward reserves. Redeemed tokens are permanently removed; any replacement inventory for rewards must come from remaining allocations or separately funded market purchases.

Parameter policy and evaluating the model

Predictability with bounded discretion

The contract limits supply; allocation policy guides its distribution. Emissions, scoring weights, redemption terms, and incentive budgets shape behavior within those boundaries. Adjustments should be infrequent and transparent, preserving predictability while responding to evidence.

Parameter decisions should consider publisher retention, market liquidity, service capacity, cash requirements, and remaining reserves together. Stronger prices may permit lower emissions without weakening participation; declining reserves may also require conservation. A larger reward budget must be evaluated against its potential selling pressure.

Evaluating the economic loop

Evaluation should distinguish activity attracted by temporary incentives from demand that persists because services are useful. Poor advertiser results weaken repeat spending and publisher opportunities even when token incentives initially attract participation.

Relevant measures include advertiser retention and acquisition costs, publisher earnings and retention, credit use, redemptions and completed burns, reserve coverage, operating cash results, and liquidity depth. Pending burn balances should reconcile with redemptions and on-chain transactions.

Accountability and progressive decentralization

Adbytes controls traffic scoring, eligibility, balances, campaign approval, and withdrawal review. On-chain transfers and burns are observable; off-chain traffic and service obligations require reporting and reconciliation. Selected treasury, reward-allocation, or parameter decisions could progressively move into on-chain governance, with other platform functions decentralized where verification and service quality permit. This is a possible direction, not an implemented governance system or a fixed commitment to decentralize every function.

The proposition is straightforward: useful contributions earn tokens, useful services motivate redemption, and burns permanently remove redeemed supply. Cash-generating operations support continued delivery and can finance further participation. Adbytes tests whether these mechanisms can reinforce one another sufficiently to sustain a valuable advertising network beyond its initial reserve incentives.

Technical references

[1] [Bitcoin Developer Guide on mining](#) · Contribution and pool mechanics

[2] [ADBYTES token explorer](#) · Base token contract

[3] [ADBYTES token portal](#) · Wallet and staking interface

ADBYTES on Base

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Token participation involves market, operational, custody, and contract risks. This paper describes the economic design; it is not a security audit or an attestation of treasury coverage.