

# **Algem: a liquid assets hub on Astar Network**

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## **Abstract**

Algem is a permissionless DeFi dApp for liquid assets built on the Astar Network. This document introduces Algem's products and describes their specifications.

At the beginning, the Liquid Farming concept will be introduced. Its core mechanics, especially the rewards distribution system and the role of ALGM, Algem's utility tokens, will be specified.

This paper proposes Liquid Staking V2.0, a revised architecture of Liquid Staking V1.5. The new liquid token will be introduced, and the core features, including staking/unstaking, voting, and the cashback system, will be described.

We will introduce the Liquid Crowdloan concept, a novel fundraising mechanism, and begin by analyzing currently used models like ICO/IEO/token sale platforms. Based on the results of this analysis, we will introduce the design of this product.

Finally, the paper describes the utility of the ALGM token and discusses the main goals behind its tokenomics.

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## **Algem vision**

Our vision is empowering our users for a more flexible, mobile, and liberated life. Despite the significant advancements in safety and technology in modern life compared to 70-80 years ago, the global financial system remains fragmented, and the acquisition of wealth remains a challenging endeavor. Here are some notable issues:

- Local conflicts leading to the destruction of capital funds;
- Inflation of fiat currencies, with Argentina and Turkey serving as prime examples;
- Challenges in accessing high-quality financial instruments outside of North America, the European Union, and certain Asian countries;
- Lack of transparency among major traditional financial institutions and counterparty risks;
- Cross-border transactions remain expensive and time-consuming.

Under these circumstances, cryptocurrencies are becoming increasingly appealing to millions of users worldwide. Despite being in its early stages, the crypto infrastructure can already offer various solutions to address the risks and frictions mentioned.

The purpose of Algem, therefore, is to continue to expand these possibilities and empower our users with services that enable greater flexibility, mobility, and freedom.

In order to realize this ambitious vision, Algem's infrastructure must improve and new services should be introduced.

# The Liquid Farming

## Overview

The Liquid Farming concept is a successor to the liquid staking concept with one significant difference: Liquid Farming allows users to remain liquid while participating in farming on AMM pools. It introduces new possibilities and strategies for liquidity providers, which will be further discussed in this paper.

## Definitions

**pair/pool:** a pair of two assets on an AMM

**ERC20:** a second asset in the pair with ASTR (other blockchain platforms native tokens)

**vault:** the contract that distributes rewards and mints/burns liquid tokens. An expiration date is established when the vault is initialized.

**expiration:** the date when deposits in the vault become unavailable, and ASTR becomes available for every holder of the corresponding IASTR to claim.

**IASTR:** a liquid XC20 [\[1\]](#) token, unique to each vault. IASTR is a liquid asset that essentially functions as a zero-coupon bond on ASTR, providing the right to claim the underlying ASTR after a specified expiration date.

**ERA:** a unit of time within a vault, presently set at one week.

**farming rewards:** tokens distributed by an AMM to its liquidity providers including governance tokens for farming concepts and trading fees for AMMs utilizing the concentrated liquidity concept.

## Mechanics and user flow

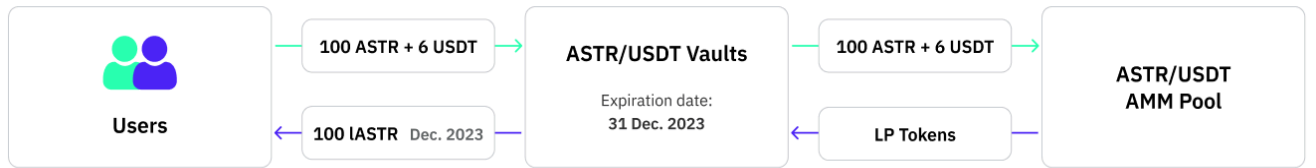
### Supply liquidity and deposit

A user provides ASTR and ERC20 in a supported pair through Algem's user interface. Assets are sent to an AMM and Algem smart-contract receives LP tokens back. The user then selects a vault to lock these LP tokens. Vaults vary based on the expiration date and the size of ALGM incentive rewards; generally, vaults with a more distant expiration date receive higher incentives.

## IASTR minting

The vault smart contract mints a number of corresponding IASTR tokens equal to the supplied ASTR onto the user's address. From this point until the expiration date, a user can engage in various activities of their choosing using their IASTR, including but not limited to:

- add to the ASTR/IASTR pool and earn trading fees;
- utilize as collateral on lending dApps;
- hold until the expiration date;
- sell a portion or the entire amount (without affecting farming rewards).



## Rewards distribution

A user collects *ALGM incentives* and *farming rewards* for their participation in a vault. Rewards are distributed at the start of each ERA and should be manually claimed.

### a. ALGM incentives

Rewards are defined by the following equations:

$$rewards_{algm} = \frac{user_{astr}}{vault_{astr}}$$

$user_{astr}$ : the total amount of ASTR staked in this vault by a particular user

$vault_{astr}$ : the sum of all ASTR staked in a vault across all users

Users receive these incentives proportionally to their liquidity in each vault.

## **b. Farming rewards**

The distribution of farming rewards is more complex.

Every vault contains an ALGM staking pool, and users need to stake ALGM tokens in this pool to receive AMM's farming rewards, usually by re-staking their ALGM incentives.

A share of farming rewards for a user in each ERA is ultimately determined by the relationship between the share of their ASTR-ERC20 liquidity in a vault and the share of their ALGM staked in the pool:

$$rewards\ share_{farming\ rewards} = a * \frac{user_{algm}}{vault_{algm}} + (1 - a) * \frac{user_{astr}}{vault_{astr}}$$

**a**: A weighting parameter that determines the balance between ALGM and ASTR required for receiving the farming rewards of a vault. The parameter takes values in [0,1] and linearly increases each ERA making ALGM staking pool more and more important for the farming rewards distribution.

$user_{algm}$ : the total amount of ALGM staked in the vault's staking pool by this particular user

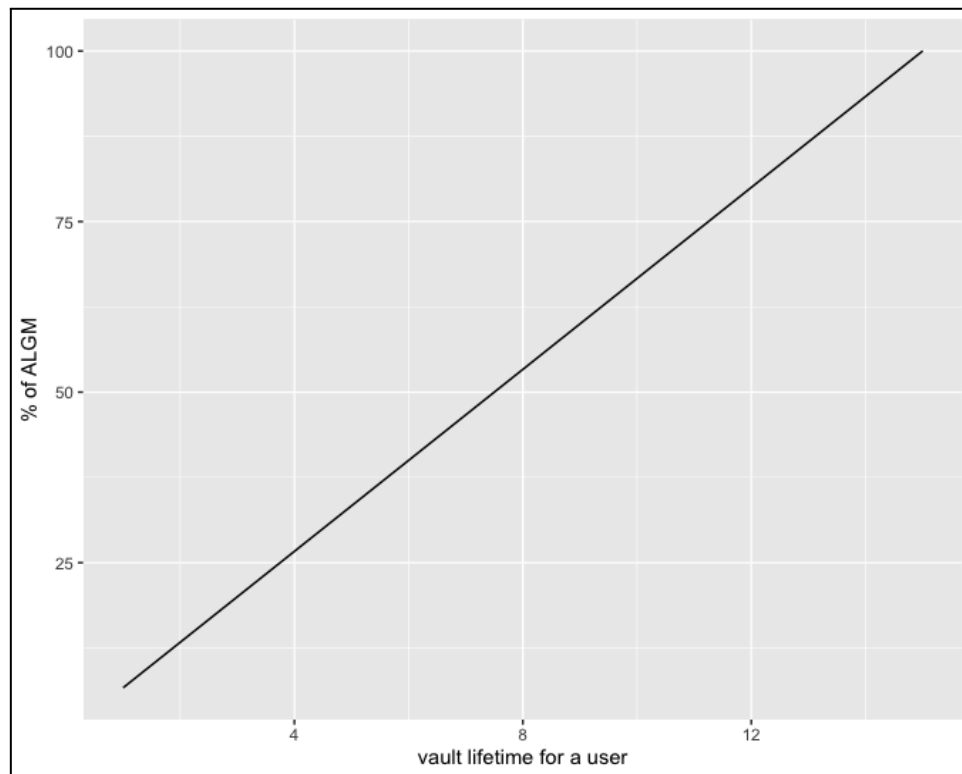
$vault_{algm}$ : the sum of all ALGM staked in the vault's staking pool across all users

The parameter **a** is determined by a linear function, that is a function of the ERA. The function starts at 0 and reaches 100% over the lifetime of the vault.

$$a = \frac{n}{lifetime}$$

Where **n** is the current week of participation for a given user, and lifetime is the total lifetime of a vault. Lifetime is measured with respect to when a user joined. Hence, if the total lifetime of a vault is 10 weeks, one user could be in week 9, but another user could be in week 1.

This defines a simple linear function as shown below:



The percentage of the farming rewards per ERA, which is influenced by the ALGM staking pool

While in the first week, a user's farming rewards depend entirely on their ASTR-ERC20 liquidity share, in the last week, conversely, the farming rewards rely entirely on their share in the ALGM staking pool.

Here is the table for the 14-week vault to better illustrate this dependency:

Week	The percentage of the farming rewards per ERA, which is influenced by the <b>ALGM staking pool</b> (calculated for each user).	The percentage of the farming rewards per ERA, which is influenced by the <b>share of user's ASTR-ERC20 liquidity</b> in a vault (calculated for each user).
1	0,00%	100,00%
2	7,69%	92,31%
3	15,38%	84,62%
4	23,08%	76,92%
5	30,77%	69,23%
6	38,46%	61,54%

7	46,15%	53,85%
8	53,85%	46,15%
9	61,54%	38,46%
10	69,23%	30,77%
11	76,92%	23,08%
12	84,62%	15,38%
13	92,31%	7,69%
14	100,00%	0,00%

When a user initially joins a vault and likely does not have any ALGM tokens, the ALGM staking pool does not impact the farming rewards for the first ERA. During this period, the farming rewards solely depend on the share of the user's ASTR-ERC20 liquidity, similar to the scenario where liquidity is directly supplied on an AMM.

After the first ERA, a user receives their initial ALGM incentives, and at this point, the ALGM staking pool begins to influence the distribution of farming rewards, with an impact of 7.69%. This implies that if the user opts not to stake ALGM in the ALGM staking pool, they will lose 7.69% of the farming rewards, and this impact will continue to grow accordingly to the table.

This mechanism encourages users to stake their ALGM incentives in the ALGM farming pools and, ultimately, reduce ALGM velocity.

## Liquidations

To maintain a 1:1 ratio of ASTR:LASTR, the liquidation mechanism is implemented.

A liquidation function monitors the quantity of underlying ASTR in a user's LP tokens, and if this quantity falls below the predetermined threshold, liquidation will take place.

The liquidation sequence is as follows:

- The quantity of underlying ASTR in a user's LP tokens falls below the predetermined threshold, and the liquidation function withdraws ASTR + ERC20 token back from a pool;



- An ERC20 token is swapped to ASTR to ensure the initial number of ASTR. For example, if 100 ASTR were initially added to a vault, the same number will be redeemed;
- As a result, an initial number of ASTR (100 ASTR in our example) and a varying number of ERC20 tokens (this number will be less than the initially deposited number) will be withdrawn from a vault after liquidation and swap.

Depending on the number of IASTR a user still holds, several scenarios are possible further:

1. **A user holds an initial number (100 IASTR) of IASTR in an account.** 100 IASTR will be burned, and the user receives 100 ASTR back;
2. **A user sold a part (20 IASTR) of IASTR, with the remaining 80 IASTR still in the account.** The 80 IASTR will be burned, and the user receives 80 ASTR back. 20 ASTR will be sent to the withdrawal pool, and they can be claimed by any IASTR holder after the expiration date;
3. **A user sold all (100 IASTR) IASTR tokens.** 100 ASTR will be sent to the withdrawal pool, and they can be claimed by any IASTR holder after the expiration date.

No fees or penalties will be charged for the liquidation.

### **Possible scenarios for users until the expiration date**

#### **a. A user waits until an expiration date**

They have the option to withdraw ERC20 along with ALGM incentives and farming rewards accumulated over the vault's life cycle.

#### **b. If the liquidation occurs**

They will receive the remaining ERC20, along with ALGM incentives and farming rewards earned prior to the liquidation.

#### **c. Closes deposit before an expiration date**

They have the option to withdraw ERC20 along with ALGM incentives and farming rewards earned before closure.

**Note 1:** In every scenario, the amount of ASTR a user can claim after the expiration date depends on the quantity of IASTR they still possess. If a vault user has no IASTR tokens in their account, the corresponding ASTR tokens will be transferred to the withdrawal pool, and can be claimed by any IASTR holder after the expiration date.

**Note 2:** ALGM incentives and farming rewards can be claimed in each ERA.

**Note 3:** The number of ERC20 a user will receive is subject to price fluctuations in an AMM pool, but the number of ASTR is always equal to the initial amount.

- **The prices remain unchanged.** The original amount of ASTR and ERC20 will be returned from the pool.
- **The ASTR price has increased.** The pool's ASTR amount will decrease; during withdrawal, some ERC20 will be exchanged for ASTR, resulting in the return of the initial ASTR quantity and a reduced number of ERC20.
- **The ASTR price has decreased.** The pool's ASTR amount will increase; during withdrawal, some ASTR will be exchanged for ERC20, leading to the return of the initial ASTR quantity and a higher number of ERC20.

## Benefits for all the participants

### The vaults users

- Additional ALGM farming rewards;
- The potential to earn more farming rewards compared to directly using an AMM, provided proper engagement in the ALGM farming pool;
- Extra earnings through the utilization of IASTRs;
- The ability to hedge farming positions by selling IASTR. This will be profitable if the ASTR price drops between the time a user joins the vault and the expiration date.

An example:

**Point A:** A user provides 1,000 ASTR and 60 USDT. The ASTR/USDT price is \$0.06. The IASTR/ASTR price is 0.9, and the user sells all their 1,000 IASTR tokens for 54 USDT ( $900 \times 0.9 \times 0.06$ ).

**Point B:** After the expiration date, the ASTR/USDT price has dropped to \$0.05, resulting in the following amounts of assets to receive: 1,000 ASTR and 59.542 USDT. Initially, the amounts were 1095.44 ASTR and 54.77 USDT, but 95.44 ASTR were swapped to USDT in order to reach the initial number of ASTR. The user can't claim ASTR because IASTR was sold at Point A, thus their USDT value at Point B is calculated as  $59.542 \text{ USDT} + 54 \text{ USDT} = 113.542 \text{ USDT}$ .

In case he had not sold the 1,000 IASTR at Point A, his USDT value at Point B would have been equal to  $1,000 \times 0.05 + 59.542 = 109.542 \text{ USDT}$ .

As a result, the user earned an additional 4 USDT due to selling IASTR tokens. The farming rewards are equal in each case.

### **External IASTR buyers**

If a user considers the price of IASTR tokens a good deal, they can buy and hold them before the expiration date or trade them on an AMM later.

### **Automated Market Makers**

Algem's incentive mechanism ensures that AMMs will attract more sustainable liquidity flows to their pools.

### **Revenue generation**

Algem charges a 10% fee on the farming rewards, which will ultimately be distributed to the ALGM stakers.

### **Conclusion**

The Liquid Farming introduces new opportunities for liquidity providers and enhances their revenue with additional incentives and the use of liquid IASTR tokens. In contrast to the incentive campaigns of the majority of DeFi projects, where the governance token is essentially a farming asset with limited utility, ALGM plays an essential role in the earning process. The farming mechanic introduced in this chapter reduces ALGM velocity and establishes a permanent demand for this token.

# The Liquid Staking 2.0

## Overview

Liquid staking has recently emerged as one of the primary DeFi narratives, leading to substantial gains in Total Value Locked (TVL) for related decentralized applications (dApps). Users enjoy two significant advantages: the ability to exit staking positions without undergoing an unstaking period and the opportunity to utilize liquid staking tokens across various DeFi dApps.

In this section, we will introduce Algem's Liquid Staking V2.0 and observe its core mechanics.

## The drawbacks of the Algem's Liquid Staking V1.5

The Liquid Staking V1.0 was first introduced on the Astar Network in July 2022. From the user's standpoint, it functioned similarly to native dApp Staking [\[2\]](#), requiring manual claiming of staking rewards in each ERA. The liquid nASTR is pegged to ASTR at a 1:1 ratio and maintains nearly the same price, with deviations not exceeding 0.2%. In March 2023, version 1.5 was introduced, allowing users to stake ASTR in various dApps added to the dApp Staking.

However, this version did not address these significant drawbacks:

1. The current architecture involves the use of adapter contracts [\[3\]](#), introducing security risks and negatively impacting the scalability of Algem;
2. nASTR pools experience low trading volumes and LPs face minimal trading fees, primarily due to the absence of inherent incentives for trading nASTR on AMMs. As a result, the success of nASTR pools heavily relies on farming tokens and other forms of external incentives;
3. Utilizing nASTR beyond the Astar Network on other parachains [\[4\]](#) is unfeasible due to its ERC20 token format.

These drawbacks necessitate the updating of the Liquid Staking architecture.

**Note:** While adapter contracts currently pose a bottleneck for the dApp, they will prove beneficial once Algem launches its mobile app. This is because users will find

it much more convenient to utilize their liquid tokens on mobile devices in a "one-window" format rather than switching between multiple apps.

## The goals behind the V2.0 update

1. Address the issues outlined above through architecture design without relying on external token incentives;
2. Ensure a seamless transition for users from the old to the new architecture;
3. Enhance user flexibility throughout the staking process;
4. Ensure a seamless integration of the liquid token with DeFi dApps.

## Definitions

**xnASTR:** the liquid XC20 reward bearing token

**ERA:** a unit of time within dApp Staking which is equivalent to 7200 blocks, approximately 24 hours.

**veALGM:** a voting escrow token for Algem's ALGM token acquired through ALGM staking.

**Liquid Staking Discount NFT:** a NFT collection, issued by the Algem team, provides its holders with a 10% discount on the liquid staking management fee.

## Mechanics and user flow

To achieve the mentioned goals, a rewards-bearing architecture has been chosen with xnASTR as a liquid token. The "x" in xnASTR denotes its cross-chain nature due to its XC20 format.

This mechanism eliminates the need for manual claiming of staking rewards; instead, they accumulate on the liquid staking contract, and the xnASTR/ASTR ratio steadily increases over time.

The xnASTR price is determined by the following equation:

$$xnastrValue = \frac{stakedASTR + rewardPool}{xnastrTotalBalance}$$

**stakedASTR:** the whole number of ASTR staked;

**rewardPool:** a pool where all staking rewards are accumulated. Additionally, it is used as the fund for the immediate unstaking function.

**xnastrTotalBalance:** the whole number of xnASTR minted

## Staking and xnASTR minting

A user stakes their ASTR through the liquid staking form and receives liquid xnASTR tokens back. The number of xnASTR tokens to receive is determined by the following equation:

$$xnastrNumber = \frac{astrAmount}{xnastrValue}$$

## Unstaking

A user unstakes their ASTR through the liquid unstaking form. The number of ASTR tokens to receive is determined by the following equation:

$$astrNumber = xnastrNumber \times xnastrValue$$

## There are several options for unstaking:

- Regular unstaking through the liquid unstaking form: A user receives their ASTR after 10-13 ERAs, xnASTR will be burned.
- Immediate unstaking through the liquid unstaking form: A user receives their ASTR immediately minus a 1% fee, xnASTR will be burned. This option is available in case there are enough funds in the rewardPool.
- A user can sell xnASTR with ASTR on an AMM.

## The rewardPool re-staking

A feature has been added to re-stake staking rewards from the rewardPool. The aim of this feature is to enhance the APR for users through the compounding interest effect.

## Vote for dApps to stake

The nature of dApp Staking lies in the capacity to stake ASTR in favor of dApps built on the Astar Network. In return, these dApps gain Build2Earn rewards which is a form of base income and consistent cash flow for their teams.

To allocate ASTR among the dApps, Algem has implemented a voting mechanism. Users cast their votes using veALGM, and then ASTR is distributed among the dApps based on their voting power.

For example:

dApp 1: the voting power is 100 veALGM / 22,(22)%

dApp 2: the voting power is 150 veALGM / 33,(33)%

dApp 3: the voting power is 200 veALGM / 44,(44)%

When a user stakes 1,000 ASTR, the distribution of their tokens among the dApps is as follows:

dApp 1:  $22,(22)\% \times 1,000 = 222.22$  ASTR

dApp 2:  $33,(33)\% \times 1,000 = 333.33$  ASTR

dApp 3:  $44,(44)\% \times 1,000 = 444.44$  ASTR

The same for unstaking.

In future iterations, a more sophisticated voting mechanism will be implemented with the primary goal of ensuring distribution based on the dApps' contribution, development progress, and other achievements.

## Cashback

Cashback is a mechanism that allows users to receive a portion of the liquid staking management fee back. To qualify for cashback, users need to possess the Liquid Staking Discount NFT and lock xnASTR in the liquid staking dashboard. The tokens can be unlocked immediately without any waiting period. Cashback can be claimed manually for every ERA.

It is also feasible to create additional discount NFTs with varying discount sizes. If a user holds multiple discount NFTs with different discount percentages, the discount applied will be based on the NFT with the highest percentage.

## **Bridge**

To facilitate a smooth transition from the old nASTR token to the new xnASTR token, a bridge will be implemented. This process involves burning the nASTR token and issuing the corresponding amount in xnASTR. The quantity of xnASTR to be issued will be determined by the xnASTR/ASTR rate at the time of the transaction.

## **Revenue generation**

Algem charges a 10% fee on the liquid staking rewards, which will ultimately be distributed to the ALGM stakers.

## **Conclusion**

In this section, we've discussed the objectives of the Liquid Staking V2.0 update and introduced its core mechanics.



# The Liquid Crowdloan

## Overview

At the beginning of this chapter, we will explore various forms of fundraising in the crypto sphere, and then introduce the concept of Liquid Crowdloan.

## Crypto fundraising retrospective

### ICO (initial coin offering)

The ICO concept gained widespread popularity in the years 2016-2017 and likely emerged as a central narrative for the Ethereum Network during that period. It represented a relatively fair method of token distribution, allowing any user to participate through a straightforward transaction to the ICO contract (until whitelists became mandatory in the majority of sales).

Nonetheless, ICOs came with several drawbacks:

- As these sales became more widespread, the phenomenon of "gas wars" emerged, leading participants to often pay commissions greater than the allocated size.;
- The gas wars eventually resulted in congestions on the Ethereum Network, higher gas prices, and inconvenience for other users;
- The simplicity of fundraising through ICOs led to numerous low-quality or even scam projects flooding the market. Coupled with the lack of quality due diligence by users (buyers), this resulted in significant and irretrievable losses;
- Uncertain legal status, where tokens could be considered securities from the SEC perspective, resulted in fines for some companies.[\[5\]](#)

### IDO/IEO

These concepts are quite similar and emerged in the years 2020-2021, being considered as successors to ICOs. These sales added a degree of certainty and trust to projects as they underwent a due diligence process by exchanges. However, this type of token distribution cannot be deemed fair, as it imposed strict rules for

participants to take part in. Typically, this involves holding a specific amount of exchange tokens for a designated period.

### **Token sale platforms**

Platforms like Coinlist and Tokensoft have recently become the primary choice for token sales. They provide a thorough level of due diligence and significant project awareness. However, similar to IDO/IEO, the token distribution process lacks fairness. Moreover, the mandatory KYC process introduces an additional layer of inconvenience for users.

A common drawback of all the mentioned token sale methods is that users expose their funds to risk when purchasing these new tokens. Unlike BTC and ETH, which have already undergone the price discovery process, tokens from new projects still need to navigate this stage and determine their fair price, which may differ significantly from the initial sale price.

### **Lockdrop and crowdloan**

These concepts are employed not for fundraising but mainly for fair token distribution (and to secure a parachain slot in the case of the crowdloan). The lockdrop was originally proposed and conducted by the Edgware [\[6\]](#) team in 2019, and later by Plasm Network (now Astar Network), while crowdloans have become one of the main narratives at the end of 2021 due to Polkadot's parachain auctions [\[7\]](#).

In each case, the user's tokens have to be locked for a certain period of time. As a reward for this contribution, users receive the project's tokens, the value of which comes from the opportunity cost of their locked tokens.

A fair distribution model and zero-risk nature (aside from the opportunity cost) were supposedly the main reasons for the success of these forms of fundraising.

## **The Algem's Liquid Crowdloan**

The Liquid Crowdloan is a novel fundraising mechanism proposed by the Algem team, combining ICO/IEO/IDO goals with lockdrop/crowdloan methods. During the event, ALGM tokens will be fairly distributed among all participants based on the

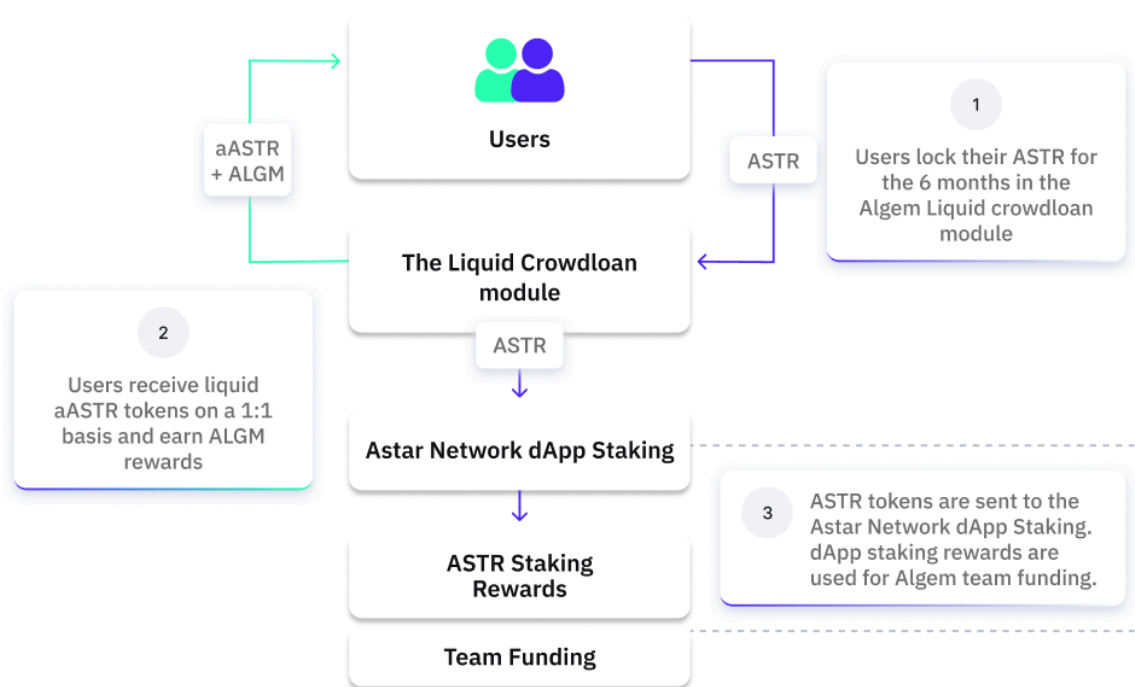
size of their contribution. In exchange, the Algem team will receive all the staking rewards for the locked tokens, essentially serving as the source of funds. The Liquid Crowdloan is built on top of Astar Network's dApps Staking and leverages its capabilities.

## Definitions

**aASTR:** A liquid XC20 token, asset that essentially functions as a zero-coupon bond on ASTR, providing the right to claim the underlying ASTR after a specified expiration date.

**expiration:** Date when ASTR becomes available for every holder of the aASTR to claim.

## Mechanics and user flow



## ASTR lock and aASTR minting

A user contributes ASTR to the Liquid Crowdloan smart contract and, in return, receives an equivalent number of aASTR tokens. The ASTR tokens are locked until an expiration date.

## dApps Staking

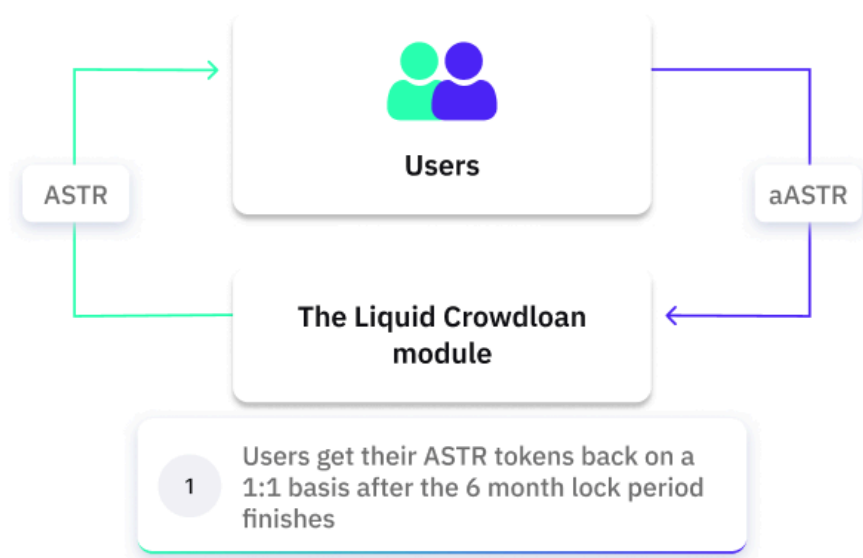
A user's ASTR is directed to the Astar Network dApps Staking module, initiating the generation of staking rewards. The Algem team claims these staking rewards until the expiration date.

## ALGM rewards

At the conclusion of the liquid crowdloan event, a snapshot of the user's balances is captured. ALGM rewards are then distributed to all participants through the vesting smart-contract over the next six months following the conclusion of the crowdloan.

The liquid aASTR tokens can be sold at any time without losing the ALGM rewards.

## ASTR unlocking



After six months from the end of the crowdloan, underlying ASTR can be claimed by any aASTR holder, even if the user did not participate in the crowdloan event.

## User benefits

- The liquid Crowdloan introduces a riskless opportunity to acquire ALGM tokens, with the only associated risk in the form of the opportunity cost;

- Every user can participate in the event without the need for any approval, and KYC is not required;
- The liquid aASTR tokens can be used to earn additional rewards on various DeFi dApps until the expiration date;
- The price of aASTR tokens will be determined by market forces and is expected to be lower than the underlying ASTR price, creating time-arbitrage opportunities for external aASTR buyers.

## **The Liquid Crowdloan as a Service**

With the Liquid Crowdloan smart-contracts ready, the Algem team plans to offer this service to other teams seeking fundraising. The payment scheme for this service is a subject of further consideration.

## **Conclusion**

The Liquid Crowdloan combines the objectives of ICO/IEO/IDO with the mechanics of lockdrop/crowdloan and introduces low-risk opportunities for its participants in a frictionless manner.

# **ALGM token**

## **Overview**

In this chapter, we'll shortly discuss challenges associated with tokenomics in DeFi projects and then make an overview of ALGM and its core mechanics.

## **Tokenomics problems**

Despite the increasing efforts by DeFi teams in this area, establishing robust tokenomics remains a challenge.

Currently, tokens are predominantly utilized for the following purposes:

- As a farming token designed to incentivize dApp usage, which inevitably creates constant selling pressure;
- For governance. Typically, participating in governance votings requires obtaining ve-tokens through staking/locking a governance token. This is often declared as token utility, but in reality, it does not generate strong demand.

In such circumstances, the value of DeFi tokens is primarily derived from speculative factors and the popularity or brand value of a dApp ("this is a well-known dApp, so I can buy its token"), rather than being driven by natural demand resulting from the utility of the token. Essentially, while dApps excel in creating value, their tokens often struggle to accrue value.

## **Goals behind ALGM tokenomics design**

- Implement mechanisms to create a robust and continuous demand;
- Reduce token velocity;
- Bridge the gap between dApp value creation and token value accrual.

## **General information**

ALGM is the XC20 token currently issued on top of Astar Network.

The token has a maximum supply of 100,000,000.

The Algem team did not conduct any form of token sale; all the initial tokens have been fairly distributed via numerous contests, testnets, and airdrops.

### **Allocations and distribution schedule**

<b>Allocation</b>	<b>Allocation size</b>	<b>Vesting schedule</b>
The Liquid Farming and other incentives	50,00%	Will be distributed during the 6 years period after the Liquid Farming launch
Team	20,00%	6 month cliff after the launch and 3 years vesting. (week-by-week unlocking)
Early investors	9,50%	6 month cliff after the launch and 2 years vesting. (week-by-week unlocking)
Crowdloan 1	2,5%	No cliff after the launch and 6 months vesting. (week-by-week unlocking)
Crowdloan 2	1%	No cliff after the launch and 6 months vesting. (week-by-week unlocking)
Reserve	6,00%	No cliff and vesting, minting after the gov. decision
Team funding reserve	2,00%	No cliff and vesting, minting when it is needed after the gov. decision
Community growth	7,25%	No cliff and vesting, minting when it is needed after the gov. decision
Airdrop	1,75%	
Astar Degens Community	0,75%	1 month cliff after the launch and 1 year vesting. (week-by-week unlocking)
Algem Nautilus Pass NFT	0,5%	1 month cliff after the launch and 1 year vesting. (week-by-week unlocking)
dApp staking and early Algem users	0,5%	1 month cliff after the launch and 6 months vesting. (week-by-week unlocking)

### **ALGM token utility**

In general, the ALGM token participates in distribution and all revenue flows passing through Algem, resulting in its two main utilities:

#### **The Liquid Farming Vaults staking pools**

As described in the chapter on Liquid Farming, each vault contains an ALGM staking pool, and it is necessary to stake ALGM incentives there to avoid losing farming rewards.

#### **ALGM as a revenue sharing token**

Algem's current revenue flow comprises these sources:

- The Liquid Staking management fee (10% charged from the staking rewards).
- The Liquid Farming fee (10% charged from the farming rewards).
- Build2Earn rewards.

These fees and rewards contribute to the revenue pool, which is then divided into two parts:

- 80% goes to the staking pool and is distributed to ALGM stakers via the staking smart contract. To participate in the revenue distribution, users need to stake and lock their tokens for a period of up to 60 days.
- 20% goes to the Algem team.

## **Governance**

The third option to utilize ALGM is to participate in governance votings. Initially, a user needs to stake and lock their tokens in the staking smart contract to obtain veALGM tokens. The number of veALGM tokens a user receives depends on the staking/locking period – the longer this period, the more veALGM tokens a user will get.

## **Algem tokenomics audit**

In October 2022, Algem underwent a tokenomics audit [\[8\]](#), and as a result, several adjustments were made. Algem's case was later mentioned in the Journal of The British Blockchain Association [\[9\]](#).



## **Conclusion**

In this chapter, we explored the core utilities of ALGM tokens and examined how these mechanics generate sustainable demand and reduce token velocity.

## References

- [1] Moonbeam. [\*Overview of XC-20s\*](#).
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- [3] Algem. [\*nASTR Farming\*](#).
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- [6] Edgeware. [\*Lockdrop\*](#).
- [7] Polkadot. [\*Parachain Slot Auctions\*](#).
- [8] Dr Stylianos Kampakis. [\*Algem tokenomics audit\*](#).
- [9] The Journal of The British Blockchain Association. [\*The Tokenomics Audit Checklist: Presentation and Examples from the Audit of a DeFi project, Terra/Luna and Ethereum 2.0\*](#).