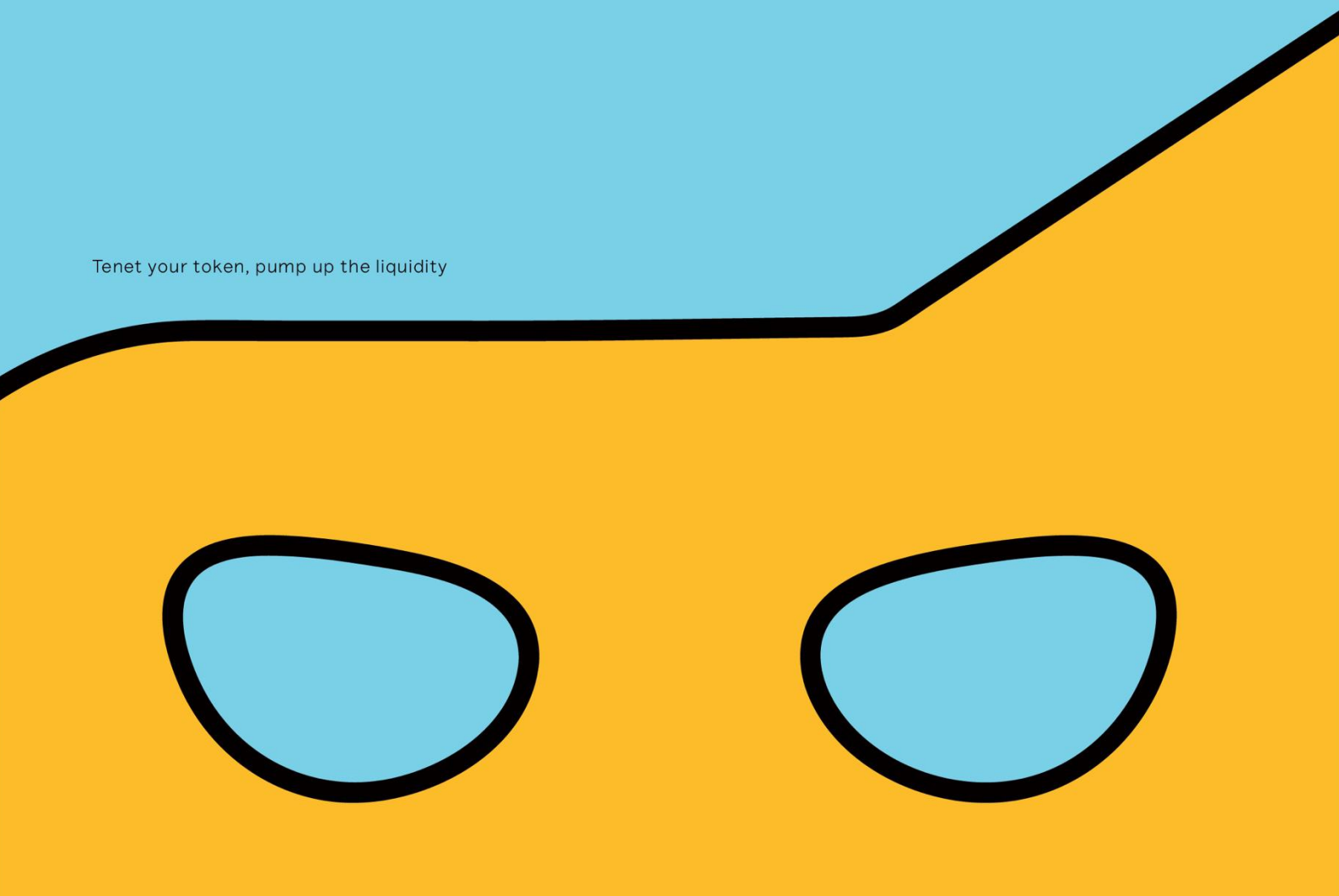
Tenet the Cross-Chain AMM Connector

TENET©

Tenet Token - *Ten*

Tenet.farm

Tenet your token, pump up the liquidity



Overview

Tenet is committed to building connectors and toolkits in the DeFi that provides liquidity accelerators, liquidity operation tools, DeFi trading aggregator, long tail asset lending solutions, etc. The basic function of Tenet is serving as a cross-chain Automated Market Maker (AMM) connector that provides a decentralized Liquidity Tap for various tokens. The Liquidity Tap is the powerhouse of the Liquidity Pool, employing a dynamic algorithm to give the Liquidity Providers fairer, richer and more efficient incentives. Thus, Tenet has the ability to attract more token holders to provide liquidity overtime.

Based on its basic functions, Tenet also developed and employed the DeFi trading aggregator. This function will allow each liquidity provider to participate and withdraw with one-click. After comparing the asset prices and APY (annual percentage yield) of several liquidity pools in different AMM platforms, it was observed that through the most optimized path to decrease the trading slippage and gas fee on chains, the complexity of frequently switching between platforms and comprehensive trading cost can also be reduced.

Before the conceptualization of Tenet, the demand side, which usually consists of token issuers, are required to design various smart contracts for different AMM platforms to ensure proportional distribution of token rewards for liquidity providers. Some token issuers even chose to allocate rewards manually to avoid the complexity and potential risk of initializing smart contracts. With the increasing popularity of liquidity mining, the demand side faces higher levels of complexity, such as unfair token rewards allocation for early participants, impermanent losses, bonus hunting, etc. Therefore, the combination of liquidity tap and liquidity pool can be a market standard in the future as it can fully guarantee the effectiveness and efficiency of AMMs. Meanwhile, when liquidity providers face multifarious pools on different AMM platforms, they cannot accurately detect the effective way to use their funds in a timely manner. Tenet's technology could help resolve such pain points by serving as a connector.

Tenet aims to build a cross-chain and cross-platform toolkit protocol that serves as a relatively easy entrance for all DeFi participants. Tenet allows the demand side to customize all parameters of the liquidity tap, and help them reach out to more

liquidity participants effectively. For token holders, Tenet is an integrated platform for yield farming. In contrast to most AMM platform's high knowledge threshold and discreteness, Tenet provides a smarter and more convenient solution, and ensures fair allocation of mining rewards through the optimization of the algorithms of initial mining incentives and LP token pools. Based on the idle funds and unallocated rewards, Tenet also has huge potential to explore the long-tail asset lending market.

Tenet White Paper V3

2020/11/23

Core Mechanism

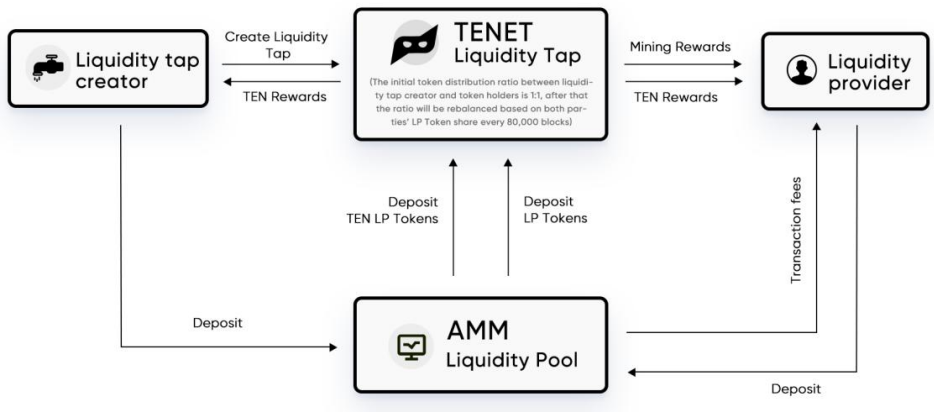
Liquidity Tap

The AMM (Automated Market Maker) is a simple and effective mechanism for creating liquidity based on the Constant Product Market Maker theory. AMM utilizes algorithms to eliminate human manipulations risks; the basic rule "if..., then..." refers to take an action (rebalancing) if the price of an asset rises or falls. The core module of the AMM mechanism is the creation of Liquidity Pools, Token holders put a proportional share of the assets of a predetermined trading pair and receive commissions and potential rewards. This process is called liquidity mining.

A single liquidity pool lacks long term and fair incentives, and many early liquidity providers receive diminishing mining rewards as their percentage of the pool is diluted by larger funds (wallets, mining pools, exchanges, etc.) because of the proportionate allocation.

The liquidity tap will serve as the infrastructure of the liquidity pool, optimizing mining reward allocation by balancing the liquidity providers' (mining participants) staking time, share, and frequency in the liquidity pool and LP token pool, and then unlocking their mining rewards linearly. The liquidity tap also simplifies the process of creating liquidity pools from creation to reward distribution and redistribution, saving the cost and effort of developing smart contracts or performing manual distribution across multiple AMM platforms by the liquidity demand side.

Since the liquidity provider receives its mining proceeds from the different liquidity pools through Tenet, which is equivalent to participating in Tenet's liquidity mining, the process yields at least three benefits: the AMM platform's commission, the liquidity demand side's Token incentive, and Tenet's mining proceeds.



AMM Cross-chain Connector

Tenet aims to build a new "AMM Integration Framework" protocol to enable faster cross-platform, cross-chain exchange of assets and to simplify interactions with different blockchains.

Currently, no AMM platform forms a moat in terms of features and attributes, so liquidity demanders and providers have little loyalty to anyone of them; many typical AMM platforms also are based on different public chains, resulting in cumbersome user experiences and high transfer costs. Thus how to realize platform interoperability through cross chain technology becomes an industry pain point. If this is solved, internal processes can be simplified, and gas costs can be lowered. Tenet's AMM cross-chain connector fills this gap.

The sharp rise in compounding interests has encouraged Yield Farming, the depositing of assets to participate in one or more DeFi protocols to get as much return as possible. The growing popularity of liquidity mining has made Yield Farming even more popular, for that in addition to the normal returns of the AMM platform, users can also earn DeFi Protocol's newly-issued native tokens.

Compound's success has pushed various other DeFi protocols to increase the distribution of native tokens as an additional incentive. For example, Uniswap, Balancer, Curve, and other exchange protocols that offer multi-asset pools allow every individual to become a liquidity provider on the platform. Liquidity providers in these protocols typically have two types of revenue streams: commission from transaction fees and newly issued governance tokens for liquidity mining.

Optimization of the Liquidity Pool Reward and LP Token Pool Reward Algorithms

However, the sustainability of the liquidity mining model will depend on how much usage the protocol can gather within the incentive period. The requirement is that, after incentives are reduced or removed, enough users will use the protocol to make it a self-sustaining ecosystem in which governance tokens can vote on relevant issues. Currently, early indicators are quite positive, but this model requires the liquidity demanders to be fully responsible for the entire process of listing, liquidity accumulation and value accumulation. It even requires completing complex smart contracts and independent audits, a huge burden.

Tenet hopes that the new mining model of liquidity tap + liquidity pool will better align the incentives between token holders and liquidity demanders, ultimately

striking a balance as the agreement evolves, early liquidity contributors won't lose benefits because of share dilution.

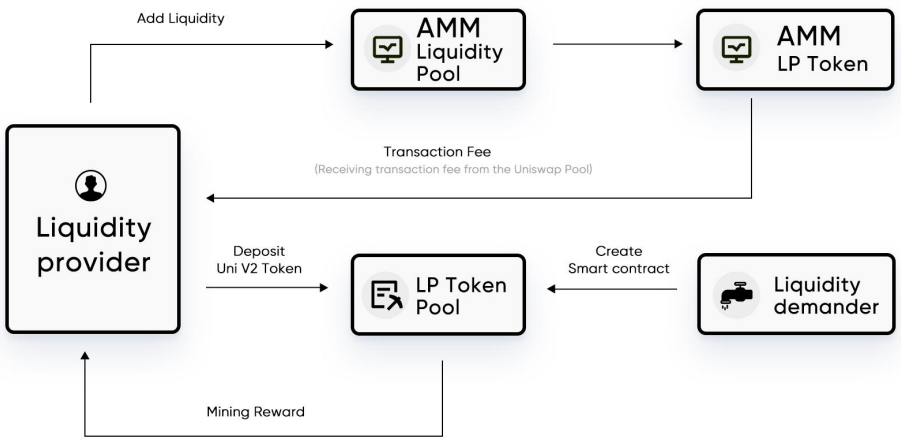
From the perspective of the liquidity provider, the LP gets a share of the transaction fees in various AMM pools. The mining model is users must persistently lockup their funds to earn passive transaction fee benefits. In the long run, later entrants will find it difficult to compete with first movers and will face the challenge attracting enough liquidity providers. Tenet has therefore optimized the algorithm for incentive rewards to motivate liquidity providers.

At the same time, in order to circumvent, in a certain extent, the inflation caused by liquidity mining, Tenet's embedded algorithm also includes an optimization for LP token rewards; it incentivize more Token holders to deposit assets to the Tenet Liquidity tap, weakening the negative impact of bonus hunters on Token inflation rates.

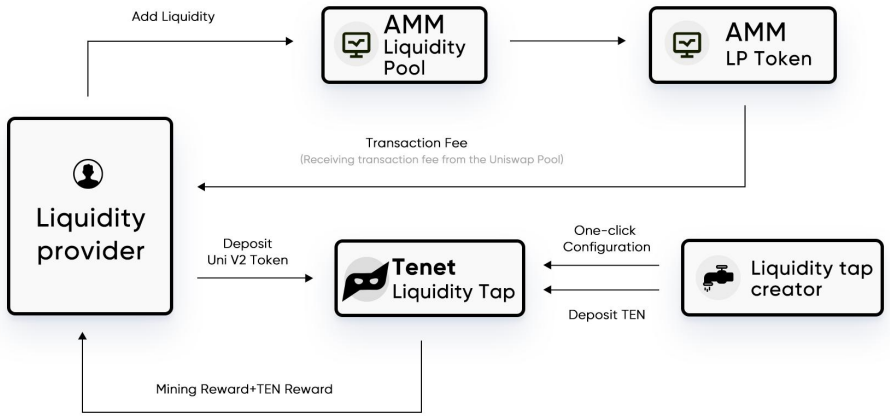
Fully Customizable Configuration

Tenet's liquidity tap configuration is fully customizable, from the AMM platform options in the initial phase, native token issuance protocol options, to the mining cycle, initial incentive requirements, mining revenue exercise option, etc., all can be customized according to the respective needs of the DeFi protocols. In order to achieve this goal, Tenet provides a variety of algorithm standards, and configuration is easy to use and highly flexible.

The mining model without Tenet:



The mining model with Tenet:

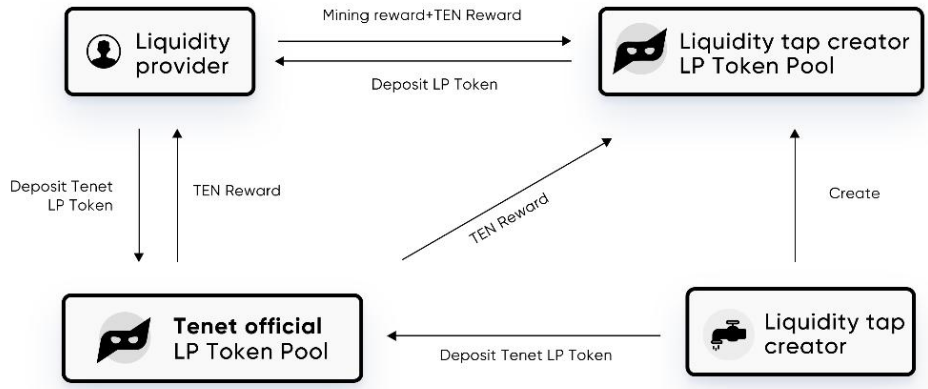


DeFi Aggregate Trading Tool

The convenience and user-friendliness of Tenet will improve the retention rate of liquidity providers. First of all, Tenet establishes the connection among AMMs on multiple chains, which supports liquidity provider's one-click participation in mining and withdrawal under optimal ROI. Tenet helps to discover the optimal capital flow path to combine frequent operations including deposit, swap, withdraw, etc. among various platforms, which as a result reduces gas fees. Secondly, Tenet also develops a comparison tool, to assist token holders in comparing and screening out mining pools with a decent revenue and comparatively low risk. In later versions, Tenet will also be able to support the automatic transfer of funds among liquidity pools to capture higher ROI.

Hybrid Revenue Model

Liquidity Providers that obtain their mining revenue on Tenet can earn Ten reward in addition to commission and DeFi protocol native tokens. When a Liquidity Provider deposits its Uniswap V2 Tokens in Tenet and places it in the corresponding liquidity tap, he or she earns revenue after a pre-determined block height. At the same time, the liquidity tap creator puts a certain amount of Ten in Tenet incentive pool, and distributes additional rewards to the liquidity provider through the liquidity tap it creates.


Liquidity provider
Mining reward+TEN Reward
Deposit LP Token
Liquidity tap creator LP Token Pool
Deposit Tenet LP Token
TEN Reward
TEN Reward
Create
Tenet official LP Token Pool
Deposit Tenet LP Token
Liquidity tap creator

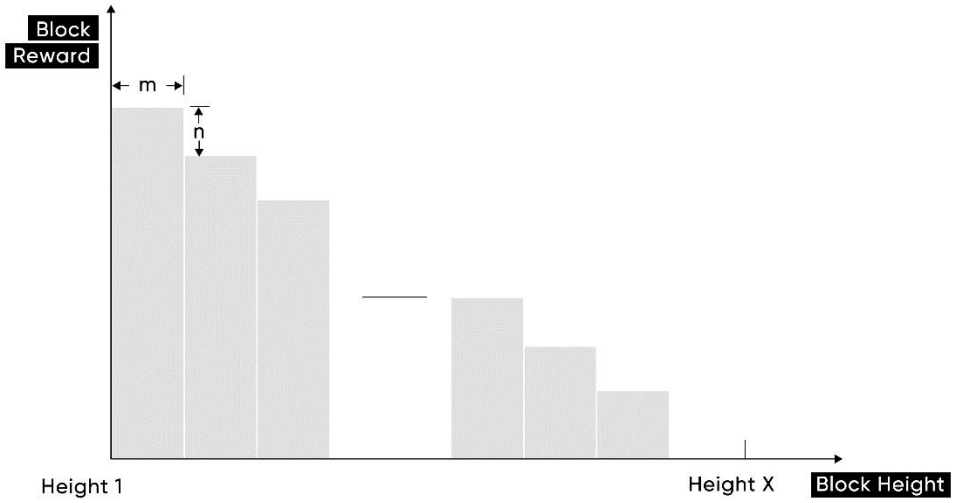
About TEN

Marginal diminishing returns distribution model

Tenet's token is TEN. TEN employs an amount deflation model, and the maximum circulation is 7,650,000. The maximum amount of TEN remained to be mined out is 4,638,282 (4,217,400 on Ethereum and 420,882 on Binance Smart Chain).

On Ethereum, the initial block reward of TEN is 10, which lasts for 20,000 blocks. After that, the block reward is adjusted to 5, and decreases by 5% for every 40,000 blocks (one cycle). Mining is expected to conclude after 50 cycles.

On Binance Smart Chain, the initial block reward of TEN is 0.2, which lasts for 100,000 blocks. After that, the block reward is adjusted to 0.1, and decreases by 5% for every 200,000 blocks (one cycle). Mining is expected to conclude after 50 cycles.



Block awards by cycle and annualized yield estimates:

TEN ON ETHEREUM

Cycle	Reward per block	Total mining amount in the cycle
0(Initial Mining)	10	200000
1	5	200000
2	4.75	190000
3	4.5	180000
4	4.28	171200
5	4.05	162000

6	3.85	154000
7	3.65	146000
8	3.45	138000
9	3.28	131200
10	3.1	124000
11	2.95	118000
12	2.8	112000
13	2.65	106000
14	2.52	100800
15	2.4	96000
16	2.28	91200
17	2.16	86400
18	2.05	82000
19	1.95	78000
20	1.85	74000
21	1.75	70000
22	1.66	66400
23	1.58	63200
24	1.5	60000
25	1.42	56800
26	1.35	54000
27	1.28	51200
28	1.22	48800
29	1.16	46400
30	1.1	44000
31	1.05	42000
32	1	40000
33	0.95	38000
34	0.9	36000
35	0.85	34000
36	0.81	32400
37	0.77	30800
38	0.73	29200
39	0.69	27600
40	0.65	26000
41	0.62	24800
42	0.59	23600
43	0.56	22400
44	0.53	21200
45	0.5	20000
46	0.47	18800
47	0.44	17600
48	0.42	16800
49	0.4	16000
50	0.38	15200

TEN ON BINANCE SMART CHAIN

Cycle	Reward per block	Total mining amount in the cycle
0(Initial Mining)	0.2	20000
1	0.1	20000
2	0.095	19000
3	0.0902	18040
4	0.0856	17120
5	0.0813	16260
6	0.0772	15440
7	0.0733	14660
8	0.0693	13860
9	0.0658	13160
10	0.0625	12500
11	0.0593	11860
12	0.0563	11260
13	0.0534	10680
14	0.0507	10140
15	0.0481	9620
16	0.0456	9120
17	0.0433	8660
18	0.0411	8220
19	0.039	7800
20	0.037	7400
21	0.0351	7020
22	0.0333	6660
23	0.0316	6320
24	0.03	6000
25	0.0285	5700
26	0.027	5400
27	0.0256	5120
28	0.0243	4860
29	0.023	4600
30	0.0218	4360
31	0.0207	4140
32	0.0196	3920
33	0.0186	3720
34	0.0176	3520
35	0.0167	3340
36	0.0158	3160
37	0.015	3000
38	0.0142	2840
39	0.0134	2680
40	0.0127	2540

41	0.012	2400
42	0.0114	2280
43	0.0108	2160
44	0.0102	2040
45	0.0096	1920
46	0.0091	1820
47	0.0086	1720
48	0.0081	1620
49	0.0076	1520
50	0.0072	1440

Rewards locked

TEN tokens are locked in for a period of time after they are mined. 40,000 blocks will be locked on Ethereum and 200,000 blocks will be locked on Binance Smart Chain.

TEN per harvest = (Block0 - LockBlock) / Block0 * Reward0
If the result of the calculation is < 0, it is treated as 0;
If no mining reward harvested for a whole lock period, the full amount of the receivable mining reward may be withdrawn.
* Block 0: number of blocks with receivable rewards
* Reward0: Receivable mining rewards
* LockBlock: locked blocks (40,000 blocks locked on ETH and 200,000 blocks locked on BSC)

Example (on Ethereum):

User A's mining block is from #10000000 to #10001000 and A mined 100 TEN.
Then A harvests his / her rewards:
Block0 = #10001000 - #10000000 = 1000
Reward0 = 100
TEN = (1000 - 40000) / 1000 * 100 < 0; Receivable TEN = 0.

Then A continues mining from #10001000 to #10053000, and mined 10000 TEN.
Then A harvests his / her rewards:
Block0 = 1000 + (#10053000 - #10001000) = 52000
Reward0 = 100 + 10000 = 10100
Then TEN = (52000 - 40000) / 52000 * 10100 = 2330; Receivable TEN = 2330.

After receiving rewards, user A gets rewards from 12000 (=52000-40000) blocks, then
Block0 = 52000 - 12000 = 40000

Reward0 = 100 + 10000 = 10100 * 40000 / 52000 = 7770

Dynamic Ratio of Liquidity Distribution

Tenet adjusts the liquidity distribution ratio between liquidity providers and liquidity tap creators through cyclical rebalancing. Factors such as their share of LP token to investment portfolio are considered so as to ensure risk is controllable and help the long-term development of Tenet protocol.

After a certain period, Tenet protocol will monitor the amount of TEN trading pair LP tokens in liquidity tap and calculate the latest ratio. To smooth the curve, the dynamic ratio in the next cycle will be an average value. As a result, the dynamic ratio will stay at a reasonable level. Moreover, Tenet protocol adjusts temporary factors to optimize the distribution of tokens.

TEN reward for each block can be divided into two parts: TEN reward for liquidity providers and TEN reward for liquidity tap creators. The initial ratio is 1:1.

The reward distribution ratio for the next 80,000 blocks on ETH (400,000 blocks on BSC) is based on the ratio of providers' LP tokens in ETH-TEN (BNB-TEN) pool to that of creators in the previous 80,000 blocks on ETH (400,000 blocks on BSC) for about 2 weeks. Community can govern the cycle for adjusting distribution ratio.

TEN mined by liquidity providers belong to them. TEN mined by liquidity tap creators (the demand side of liquidity) are distributed to tap's liquidity providers.

To encourage liquidity tap creators to create more taps and give multiple mining incentives to liquidity providers, the amount of LP tokens added by liquidity creators are multiplied by (1+X). The initial X=0.2, X can be adjusted by community.

How to calculate:

$$TEN_{USERS} = TEN_{HO} * \left(\frac{LP_{USERS}}{LP_{UESRS} + LP_{CREATORS} * (1 + X)} \right)$$

$$TEN_{CREATORS} = TEN_{HO} * \left(\frac{LP_{CREATORS}}{LP_{UESRS} + LP_{CREATORS} * (1 + X)} \right)$$

TEN_{USERS} : the amount of TEN that can be mined by liquidity providers (USERS)
$TEN_{CREATORS}$: the amount of TEN that can be mined by liquidity tap creators
TEN_{H0} : the amount of TEN reward for the current block

LP_{USERS}: the amount of ETH-TEN LP token added by USERS

$LP_{CREATORS}$: the amount of ETH-TEN LP token added by liquidity tap creators
X: a reward factor for liquidity tap creators

Reward Mechanism for Liquidity Tap Creators

In order to incentivize liquidity tap creators to provide platform users with better liquidity mining projects, TENET sets a reward factor X for liquidity creators. X is decided by Y, threshold number, and the number of added LP token addresses. At the beginning, X=0.2, Y=20, X and Y can be adjusted through community governance.

Assuming that the number of TEN one liquidity tap receives is B, the number of added LP token addresses is C, then the amount of TEN the liquidity tap creator can receive is:

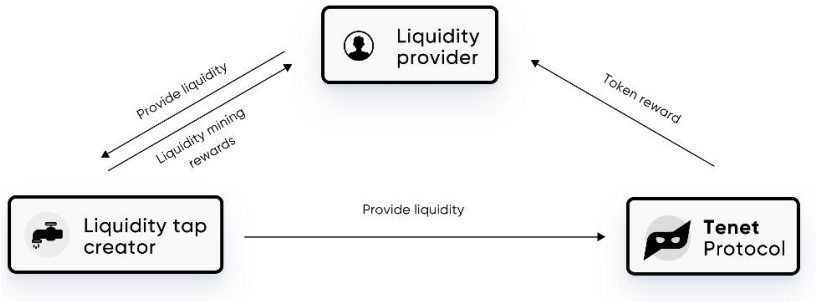
$$TEN_{LC} = \frac{B}{1+X} * \ (1 + \frac{C}{Y} * \ X)$$

*If there is no receiver of TEN, TEN will be burned.

The Incentive Loop of TEN

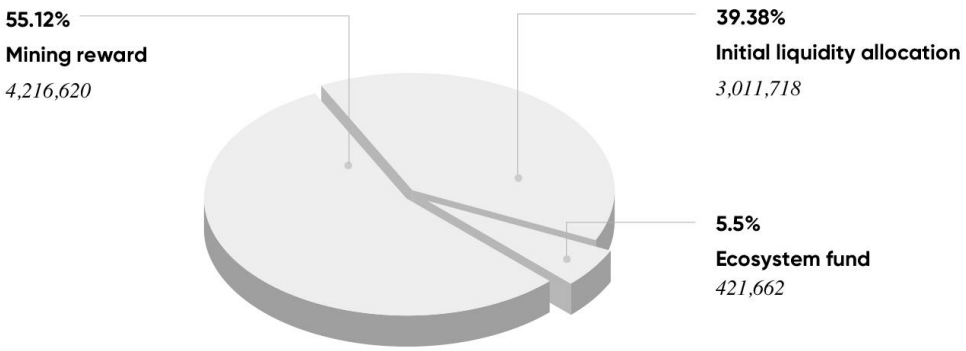
With liquidity taps for governance token trading pair LP token, Tenet gives the right to distribute TEN token reward to liquidity taps created by other projects. The goal is to encourage more liquidity tap creators to trade and add TEN on AMM platforms to obtain TEN trading pair LP token. Then, LP token can be added to Tenet's official liquidity tap and start liquidity mining. As a result, a positive loop is formed to encourage mining among liquidity creators, providers and Tenet.

Holders of TEN governance tokens are important members and stake holders of the Tenet protocol ecosystem. As the trading scale of TEN grows up, the value of TEN governance tokens will also increase, which can stabilize the liquidity of Tenet protocol governance tokens.



Tokenomics of TEN

The maximum number of TEN tokens is set at 7,650,000.
4,216,620 TEN will be generated through fair liquidity mining. 421,662 TEN are used for the long-term strategic development of the Tenet Protocol. 3,011,718 TEN are used for initial liquidity and ecosystem development.



Token Metrics of TEN

The reward during the initial incentive period is 10 TEN / block on ETH (0.2 TEN / block on BSC). The initial mining period will receive double rewards, lasting 20,000 blocks on ETH (100,000 blocks on BSC).

Total amount mined on ETH during the initial mining period = initial mining bonus * number of blocks in the initial mining phase = 10 * 20,000 = 200,000.

Total amount mined on BSC during the initial mining period = initial mining bonus * number of blocks in the initial mining phase = 0.2 * 100,000 = 20,000.

When initial mining ends, reward per block reduces by 5% once after every 40,000 blocks on ETH (200,000 blocks on ETH) for about 1 week. After 2,000,000 blocks on ETH (10,000,000 blocks on BSC), mining will stop. Every time when TEN tokens are mined, smart contracts will generate 10% TEN tokens to facilitate the long-term strategic development of Tenet protocol.

Functions and Utility Scenarios of TEN

Tenet enables the community to govern the protocol of Tenet. Holders of Tenet tokens and their representatives debate, propose and vote on all changes to the protocol. By placing Tenet tokens directly in the hands of users and applications, an increasingly large ecosystem will form and will be empowered to collectively manage the protocol into the future.

To make a governance proposal, it's required to have 1% TEN, based on the current amount of TEN. After the proposal is made, community can decide whether to execute through voting. To that end, there are two requirements:

1. The number of votes supporting execution should be higher than the number of votes against execution.
2. The total amount of votes supporting execution should be higher than 4% of the amount of TEN that have been distributed.

TEN parliament sets a 3-day-voting period. If the result is to execute the proposal, then the execution will start after a 2-day-locked period.

Members with TEN governance right can participate in the limited governing of following parameters:

1. The locked period of 10% strategic fund.
2. After how many blocks the ratio of reward distribution between liquidity providers and creators can be adjusted.
3. The extra mining rewards for liquidity tap creators.
4. The reward threshold for liquidity tap creators.

The governance on Ethereum and Binance Smart Chain will be mutually independent.