MagicVoTe (MVT or MVote): A Sustainable and Open Voting Protocol for Voting-based Farm Platforms

The MagicCrypto Team
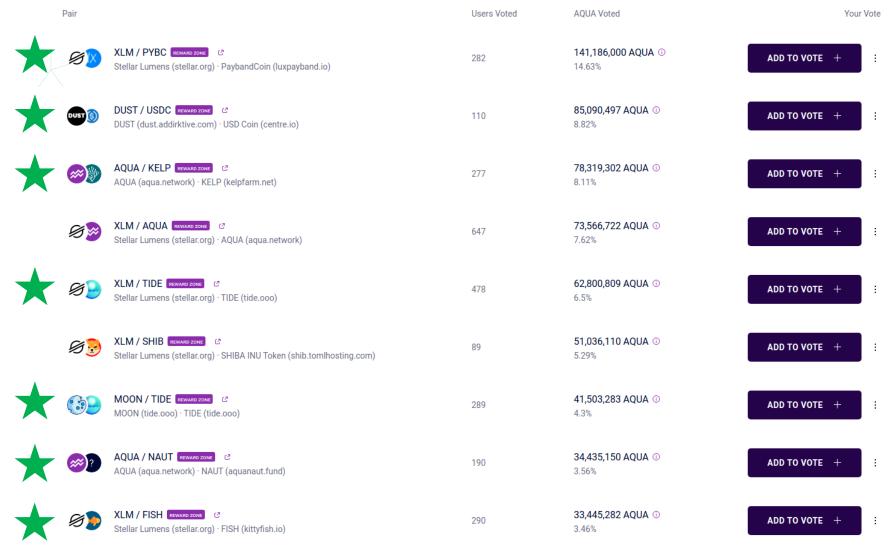
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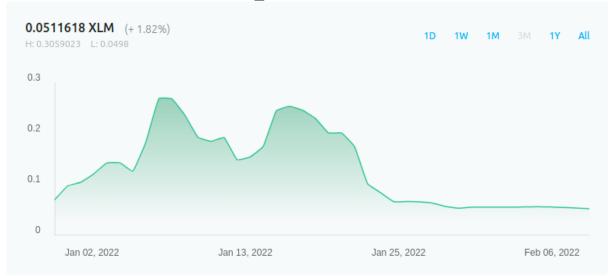First release: 25 February 2022

https://MagicCrypto.github.io/

Create Value to both Crypto Space and Real World!

Now many voting tokens (or the so-called "bribe tokens") on voting-based farm platforms like AQUA

Pair	Users Voted	AQUA Voted	Your Vote
⭐ XLM / PYBC REWARD ZONE ↗ Stellar Lumens (stellar.org) · PaybandCoin (luxpayband.io)	282	141,186,000 AQUA ⓘ 14.63%	ADD TO VOTE + ⋮
⭐ DUST / USDC REWARD ZONE ↗ DUST (dust.addirktive.com) · USD Coin (centre.io)	110	85,090,497 AQUA ⓘ 8.82%	ADD TO VOTE + ⋮
⭐ AQUA / KELP REWARD ZONE ↗ AQUA (aqua.network) · KELP (kelpfarm.net)	277	78,319,302 AQUA ⓘ 8.11%	ADD TO VOTE + ⋮
⭐ XLM / AQUA REWARD ZONE ↗ Stellar Lumens (stellar.org) · AQUA (aqua.network)	647	73,566,722 AQUA ⓘ 7.62%	ADD TO VOTE + ⋮
⭐ XLM / TIDE REWARD ZONE ↗ Stellar Lumens (stellar.org) · TIDE (tide.ooo)	478	62,800,809 AQUA ⓘ 6.5%	ADD TO VOTE + ⋮
⭐ XLM / SHIB REWARD ZONE ↗ Stellar Lumens (stellar.org) · SHIBA INU Token (shib.tomlhosting.com)	89	51,036,110 AQUA ⓘ 5.29%	ADD TO VOTE + ⋮
⭐ MOON / TIDE REWARD ZONE ↗ MOON (tide.ooo) · TIDE (tide.ooo)	289	41,503,283 AQUA ⓘ 4.3%	ADD TO VOTE + ⋮
⭐ AQUA / NAUT REWARD ZONE ↗ AQUA (aqua.network) · NAUT (aquanaut.fund)	190	34,435,150 AQUA ⓘ 3.56%	ADD TO VOTE + ⋮
⭐ XLM / FISH REWARD ZONE ↗ Stellar Lumens (stellar.org) · FISH (kittyfish.io)	290	33,445,282 AQUA ⓘ 3.46%	ADD TO VOTE + ⋮

However, all the existing voting tokens suffer from
TWO fundamental issues.

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Issue #1: Cannot maintain its price in the long term
due to the daily increased supply (while AQUA reward is limited)
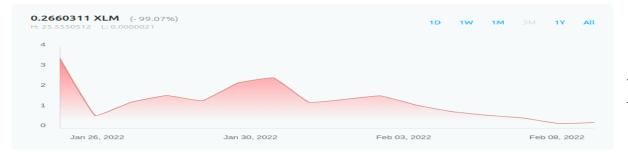
- Indeed, the price becomes unsustainable shortly after one or two weeks

$FISH (the first voting token)

$TIDE (a voting token with 1K+ holders)

$MOON (a recently proposed voting token paired with $TIDE)

Issue #2: Doesn't bring liquidity to solid tokens

- Solid tokens like USDC, yXLM, and YBX does not increase their LP liquidity by the existing voting tokens.
  - o Because the pairs with these solid tokens do not have enough AQUA votes.

XLM / yXLM **REWARD ZONE**	190	11,319,451 AQUA	
Stellar Lumens (stellar.org) · yXLM (ultrastellar.com)		1.17%	
XLM / USDC **REWARD ZONE**	67	10,929,651 AQUA	
Stellar Lumens (stellar.org) · USD Coin (centre.io)		1.13%	
XLM / YBX	53	5,808,426 AQUA	
Stellar Lumens (stellar.org) · YBX (script3.io)		0.6%	

- DUST/STAR/DODA tried to somehow address this problem but certainly failed because their eligible pools are manually selected without an open and fixed mechanism.
  - o Indeed, they mainly benefit their relevant tokens like CSM and AFR.

It is difficult to solve the issue #1, and even harder to also cover the issue #2.

Fortunately, we have come up with an **innovative** solution called MagicVoTe, when we tried to address both issues at the same time.

MagicVoTe (MVT or MVote) introduces an interesting mechanism of calculating hourly MVT reward

- It **balances the interests** of **three different actions/parties**:
  - o **Voting (using AQUA)** for MVT-listed pairs to earn free MVT;
    - We calculate a percentage for each voter (at least 100 AQUA votes), termed as Vote%.
  - o **Joining** one or more MVT- and AQUA-listed **pools** to earn free AQUA;
    - We calculate a percentage for each LPer, termed as LP%.
  - o Voting (via **burning MVT**) for the LP you joined so that it will be allocated with more MVT <u>next hour</u> (when MVT's voting takes effective soon).
    - We calculate a percentage for each MVT burn-based voter, termed as Burn%.

- The hourly **MVT reward** for each voter is **calculated** as follows:
  - o Your OnePairReward% $= min(Vote\%, \dfrac{Vote\%\times2 + LP\%\times1 + Burn\%\times1}{4})$
  - o Your OnePairReward $=$ OnePairReward% $\times$ ThisPairAllocatedMVT

Implications on how we calculate OnePairReward%

By designing it as $min(Vote\%, \dfrac{Vote\% \times 2 + LP\% \times 1 + Burn\% \times 1}{4})$, it implies:

1. If you only do AQUA votes, it equals to $0.5 \times Vote\%$.
   - The other half of your reward will be automatically burned by our reward bot.

2. If you only do LP or Burn, it equals to $0 \times Vote\%$.
   - Because as a voting protocol, you can earn free MVT only by voting.

3. If you do all three with the same percentage, it equals to $1 \times Vote\%$
   - Or just make $2Vote\% + 1LP\% + 1Burn\% \approx 4Vote\%$ to get the full reward.

So MVT automatically adjusts its hourly reward by all participants and encourages LP and MVT voting (via burning) by design.
   - Suppose the current MVT reward is 1000 per hour, the actual range of hourly MVT reward is between 500 and 1000. The rest will be burned.

Then how to decide the eligible pools that will receive MVT reward for the AQUA votes to those pairs?

Principles of deciding eligible pools on MVT

- While MVote is an open protocol (which means all pairs could have chance to be listed on MVote), pairs need to meet some conditions.
    - This is to prevent spam tokens and allocate more reward to legitimate tokens.

- Legitimate tokens should be determined by the market rather than by us.

- MVote will automatically list the top 7 tokens with **two conditions**:
    - 1) **size:** 1M+ XLM paired in the pool; and 2) **ppl:** 100+* participants in the pool.
    - To maintain MVT's sustainability, such auto tokens must be paired with MVT.
    - According to https://stellar.expert/explorer/public/liquidity-pool, yXLM, USDC, LSP, AQUA, PYBC, ETH(ultrastellar.com), and BTC*(ultrastellar.com) satisfy. **These 7 pools paired with MVT will be initially listed on MVote**.
    - Note that such listing will be updated to always select the top 7 tokens.

* We temporarily list BTC even though its users are 90 because we have only these 7 pairs currently . We will kick it out when there is another pair reaching both conditions.

While those automatically listed tokens must be paired with MVT, the liquidity can transfer

- Due to **path payments** on Stellar.

- For example, if MVT/USDC has 100K TVL and XLM/MVT has over 100K TVL, that means XLM/USDC **indirectly increases** 100K **liquidity** due to these two MVT pairs.
  - In this way, MVT brings liquidity to solid tokens while maintaining its price sustainability.

- Since all those 7 automatically listed tokens are paired with MVT, we need to set the XLM/MVT with a fixed 30% reward baseline.
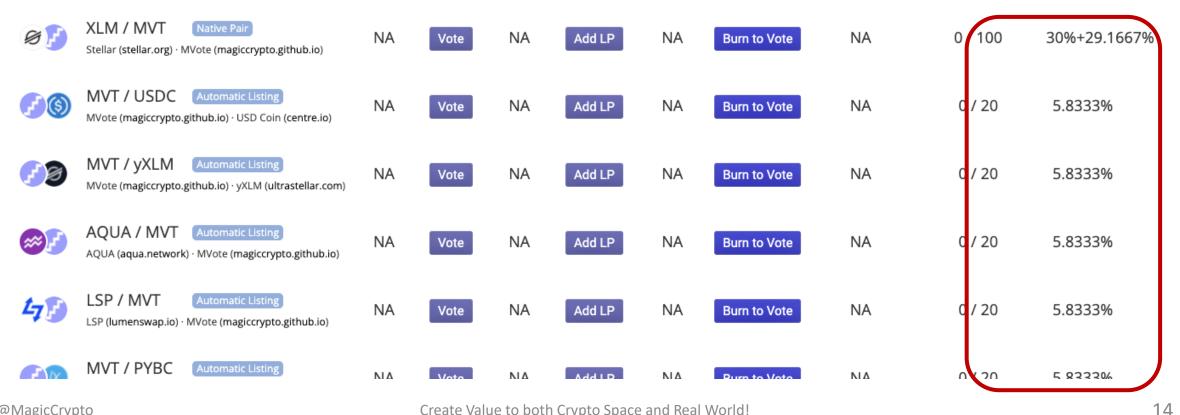 - The other 70% reward will be competed among all pairs, including XLM/MVT.

Besides the automatically listed MVT pairs, anyone can also list any pair as he/she wants to.

- Including the non-MVT pairs, but you need to pay a listing fee.
  - Such listing fee (via burning MVT) should be generally paid by the team of one particular token but could be also crowdsourced by individual users.

- **The listing fee** (subject to change by governance):
  - For a MVT pair: 50K MVT burned, roughly two-day MVT reward.
  - For a non-MVT pair: 100K MVT burned, about five-day MVT reward.
  - Note that this listing fee only makes a pair **become eligible** on MVote.
    To receive MVT, this pair must further compete with other eligible pairs.
  - We are designing a web interface (https://magiccrypto.github.io/vlist.html)
    to let team/users burn the listing fee and check the current progress of burned MVT for each pair.
  - Potential free listing are being planned if reward is not MVT but that token.

With all the eligible pools, how to determine each pair should be allocated how much MVT reward?

MVT Burns of Each Pair Determine its Reward%

- As mentioned in Page 11, XLM/MVT has a 30% reward baseline.
  - The other 70% reward will be competed among all the pairs (including XLM/MVT) according to the MVT burn percentage of each pair.

Pair									
XLM / MVT — Native Pair — Stellar (stellar.org) · MVote (magiccrypto.github.io)	NA	Vote	NA	Add LP	NA	Burn to Vote	NA	0 / 100	30%+29.1667%
MVT / USDC — Automatic Listing — MVote (magiccrypto.github.io) · USD Coin (centre.io)	NA	Vote	NA	Add LP	NA	Burn to Vote	NA	0 / 20	5.8333%
MVT / yXLM — Automatic Listing — MVote (magiccrypto.github.io) · yXLM (ultrastellar.com)	NA	Vote	NA	Add LP	NA	Burn to Vote	NA	0 / 20	5.8333%
AQUA / MVT — Automatic Listing — AQUA (aqua.network) · MVote (magiccrypto.github.io)	NA	Vote	NA	Add LP	NA	Burn to Vote	NA	0 / 20	5.8333%
LSP / MVT — Automatic Listing — LSP (lumenswap.io) · MVote (magiccrypto.github.io)	NA	Vote	NA	Add LP	NA	Burn to Vote	NA	0 / 20	5.8333%
MVT / PYBC — Automatic Listing	NA	Vote	NA	Add LP	NA	Burn to Vote	NA	0 / 20	5.8333%

While the MVote protocol is pre-designed, some important parameters require to be governed by the community over time!

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Incentivized MVote Governance

- We have designed a mechanism for incentivized MVote governance; <u>the details will be announced</u> when the first governance happens.

- Governance is mainly to adjust the following key MVote parameters:
  - https://github.com/MagicCrypto/Governance/blob/main/mvoteParams.json
  - The current 12 governable parameters listed in the right-hand side:

```
1   {"AQUAShare": "2",
2    "LPShare": "1",
3    "BurnShare": "1",
4    "XLMPairFixed": "0.3",
5    "AutoListPair": "7",
6    "AutoListSize": "1000000",
7    "AutoListPpl": "100",
8    "MVOTEPairListFee": "50000",
9    "OTHERPairListFee": "100000",
10   "MinAQUAVote": "100",
11   "MinAQUAHour": "168",
12   "MinBurnVote": "1"}
```

After understanding MVote's design, let's talk about the tokenomics of MVT.

Terms for Receiving Hourly MVT Reward

1. **Add the MVT trustline**: (you can do it on Lobstr or StellarTerm)
   - Issue account: GDPTX2Z3HTJKCHTT5JHCL7M5MD7P2HVV7QUDCTBIHW2BYLO3XR4VSRSA
   - MVT reward with no trustline will be burned each hour.

2. **Vote at least 100 AQUA for the MVT pair** via vote.aqua.network.
   - Since the AQUA web interface currently requires at least the one-week lock (even though it counts all votes), we take this one-week lock as a condition of our reward so that it is fair to those who don't know how to use StellarLab. In the future, if AQUA changes its web interface, MVT will adapt to it too.

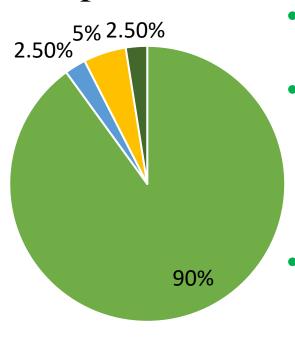- Doing all Vote, LP, and Burn to increase your voting reward.

In the MVT reward sent to you, we will use this format of memo:
MVT999.01234567890123456 24, where 1st logs the current total hourly reward and 2nd for the current hour.

You can manually verify your reward via our website. Note that the backend snapshots once only per hour.

MVT token supply: 26,666,660 in total

MVT is a pure utility token with its 90% total supply rewarded to the participants of the MVT ecosystem (no any investor sale):

- MVT Reward
- MVT Together
- Founder
- Team Members

- **MVT Reward (23,999,994):**
  - **Distributed hourly** using a vesting schedule shown in Page 20.
- **MVT Together (666,666.5):** (unlock from the beginning)
  - **2%** are for stimulating burns and governance, as well as emergency and the CEX listing fee (will notify in advance). **0.5%** will be set at **10XLM/MVT** to provide the initial liquidity and earn free AQUA SDEXv2 reward so that we can cover the XLM transaction fees, buy a future domain, and pay for the AWS cost over ten+ years.
- **Founder (1,333,333) and Team Members (666,666.5):**
  - **Distributed hourly** using a vesting schedule shown in Page 20.
  - Founder generally* will NOT receive further MVT by voting for MVT pairs (he will help some MVT pairs go into the reward zone though using unqualified votes with less than 1-week lock).
  - 2.5% will be shared by contributing team members (currently three: 0.9+0.8+0.8). They are allowed to earn more MVT by voting.

* Except the first 100 AQUA voted to create and test each pair

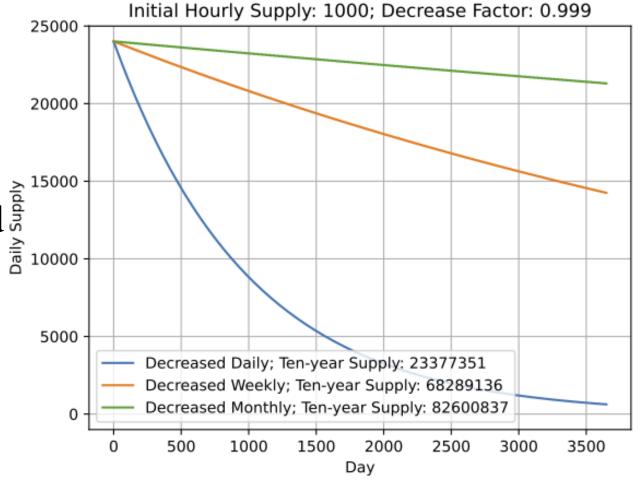# MVT reward distribution

- Unlike other Stellar reward tokens (e.g., AQUA and TIDE) that have a fixed supply added per day, MVT's newly added supply decreases every day.

- This is to guarantee MVT reward will "never" stop and help the MVT price over long term.
  - MVT reward is initially 24,000 per day (i.e., 1000 per hour).
  - Next day will be $LastDay \times 0.999$.

Initial Hourly Supply: 1000; Decrease Factor: 0.999

Decreased Daily; Ten-year Supply: 23377351
Decreased Weekly; Ten-year Supply: 68289136
Decreased Monthly; Ten-year Supply: 82600837

A Summary of MVT's Utility

1. Join LP in MVT pairs to not only receive the AQUA LP reward (if that pair has been in the reward zone) but also increase your hourly percentage of MVT voting reward;

2. Set the buy/sell orders at SDEX to receive the AQUA SDEXv2 reward;

3. Burn MVT for the pair you voted or LPed to increase your hourly percentage of MVT voting reward and make your LP safer;

4. Participate incentivized governance to adjust MVT's parameters;

5. Provide liquidity to your other fav tokens and list them on MVote.

More utility will be planned over time to reward the strong holders of MVT and the long-term believers of MagicCrypto in general.

Finally, about The MagicCrypto Team

- The team is led by Dr. Wu (@dao0x) and consists of three core members:
  - https://github.com/daoyuan14 and https://github.com/yixiao5428
  - https://github.com/CharesFang and https://github.com/yx018

- The entire team has accumulated extensive experience on blockchain:
  - Detected 100+ vulnerabilities in top blockchains, including 16 from Dogecoin.
  - A research paper entitled "*BlockScope: Investigating Propagated Vulnerabilities and Their Patching Processes in Forked Blockchain Projects*"
  - A research paper entitled "*Diving Into Blockchain's Weaknesses: An Empirical Study of Blockchain System Vulnerabilities*"
  - A research paper entitled "*AGChain: A Blockchain-based Gateway for Permanent, Distributed, and Secure App Delegation from Existing Mobile App Markets*"