Radix Planet Liquidity Mining Explained

Introduction

On April 18th, Radix Planet announced the start of its liquidity mining program on the Radix network, details of which can be found here.

Rather than taking a time based approach to liquidity incentives, RadixPlanet incentivises based on volume, to encourage participation and ensure an efficient trading experience. At the heart of this strategy are a series of Planet_LM tokens which exist for each pool on Radix Planet. Participants who swap or provide liquidity are rewarded with Planet_LM tokens, corresponding to the associated pool.

In order to provide continual demand and value for the Planet_LM tokens, periodic purchases are made with $PLANET and the Planet_LM tokens are subsequently burned (or locked in the Planet wallet in the case of early tokens that are immutable). This process increases scarcity and demand thereby increasing the value of the LM tokens.

"But as a liquidity provider, how do I determine where the best opportunities are for providing liquidity and which Planet_LM tokens have the greatest value?"

Liquidity Profitability

In order to determine the best opportunities for liquidity providers, it's important to remember that RadixPlanet uses a volume approach. This means that the pools with the highest trade volume will mint the greatest number of LM tokens and therefore provide higher value to liquidity providers. The trade volume and value locked will soon be made available on the Radix Planet UI, but in the meantime, the trade volume of each pool can be calculated by first obtaining the component address for the pool from the RadixPlanet pool list.

The component address can then be searched in the Radix Dashboard and via the "Recent Transactions" tab, we can find all the deposits and withdrawals from the component. It is recommended to look at the transaction volume over the past week or month and compare this to other liquidity pools to determine the highest volume opportunities

Another consideration to make along with volume, is the size of the pool. The number of LM tokens minted are proportional to the size of the pool which means a smaller pool will emit fewer LM tokens. Due to a smaller LM token supply, these LM tokens will have a greater value to liquidity providers. An assessment of the size of the pool can also be made using the Pool details page and observing the total number of assets in the pool.

Once the best opportunities by volume and pool size are determined, the next thing to do is to calculate the values of the LM tokens. The Planet team are working on automating this information, but in the meantime, to cater to the earliest and most dedicated liquidity providers, there is a fairly simple way of calculating the opportunity, which will be explained below.

1. **Determine Planet_LM Token Value**

Firstly, we need to determine the current value of the Planet_LM tokens with respect to $PLANET. This can be determined by observing the proportions of each token in their respective pools. Let's take an example, where we want to compare the value of 2 Planet_LM tokens:

XRD_PLANET LM - https://radixplanet.com/Tokens/Details?tokenId=8aee575b-38de-4a63-a38b-e9bc3568a6bd

XRD_CAVIAR_PLANET LM - https://radixplanet.com/Tokens/Details?tokenId=d3d4b699-1c29-405f-bb4e-3bdf956008e5

By examining the liquidity pool (https://radixplanet.com/Pools/Details?LiquidityPoolId=9d12ba6e-26b7-476a-ab2a-1a39b5286077) we can see the relative balances of these tokens which will determine their value.

The table below shows us the balance of these tokens with respect to the $PLANET token. The value can therefore be determined by dividing the $PLANET balance by that of the LM token as shown (note: values are correct at time of writing and will deviate):

Token	Pool Balance	Price (PLANET)
RadixPlanet Token V2	68.6786	68.6786
XRD_CAVIAR_PLANET LM	55.1648	1.2450
XRD_PLANET LM	5.8301	11.78

2. **Determine Planet LM Token Circulating Supply**

Once we have the price of the LM tokens, the next step is to determine the circulating supply. We can determine the maximum supply using the Radix dashboard, and then deduct the number of tokens locked in the RadixPlanet wallet to calculate a circulating supply. Using the 2 example LM tokens above:

LM Token (Link to Dashboard)	Total Supply (A)	RadixPlanet Wallet Supply (Locked) (B)	Circulating Supply (A-B)
XRD_CAVIAR_PLANET LM	21,451.5	22.9106	21,428.5894
XRD_PLANET LM	3,103.4	215.1166	2,888.2834

3. **Determine Planet_LM Token Value**

Finally, we need to determine the value of the circulating supply of these LM tokens. In order to do that, we simply take the circulating supply above and multiply by the value calculated in step 1. For the 2 example LM tokens above:

Token	Circulating Supply (C)	Price (PLANET) (D)	Total Value (PLANET) (C x D)
XRD_CAVIAR_PLANET LM	21,428.5894	1.2450	26,678.59
XRD_PLANET LM	2,888.2834	11.78	34,023.98

Conclusion

From the above we can deduce that there is significantly higher value in providing liquidity to the XRD_PLANET pool compared to that of XRD_CAVIAR_PLANET. Another consideration for liquidity providers to make, is that LM tokens are periodically purchased and burned to increase their value. The purchase of the LM token corresponding to the XRD_PLANET pool is also weighted 2x relative to all other LM tokens so liquidity providers should also factor this into their strategies when finding the best opportunities for providing liquidity on Radix Planet!