VyFi Emissions for **liquidity providers**

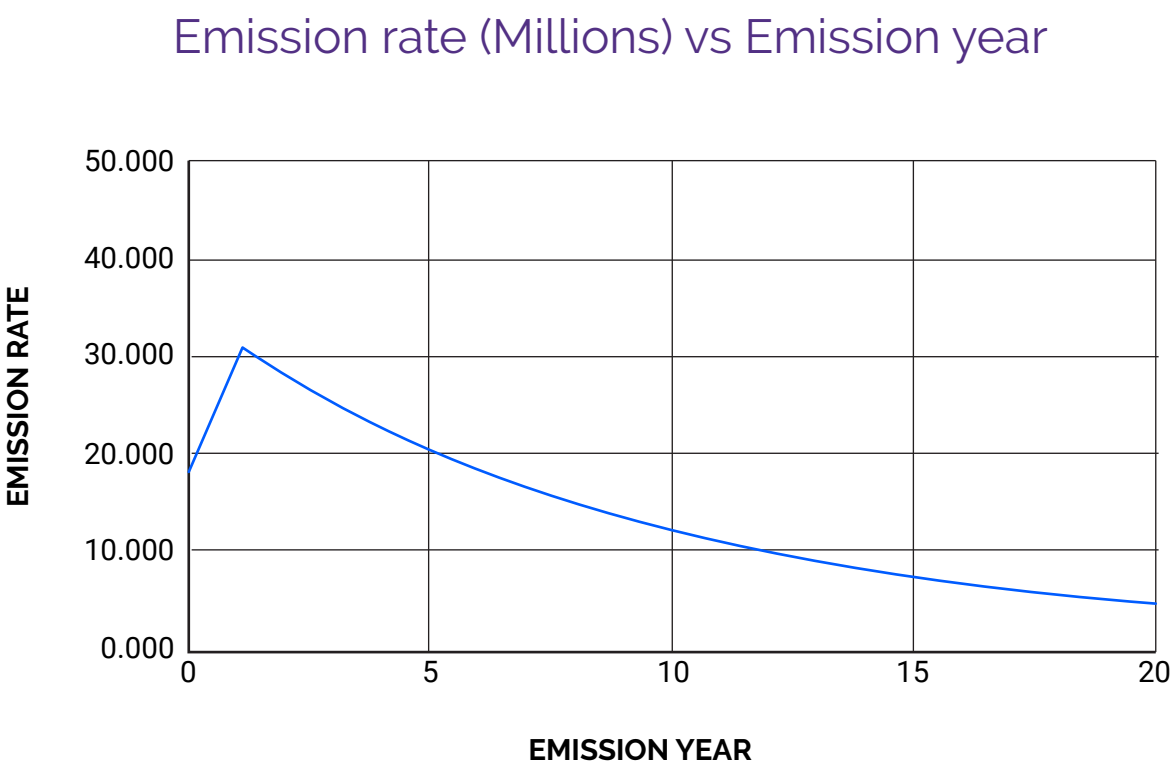
v2023

As per our tokenomic model, 85% of supply is dedicated to liquidity providers on our platform. Our principal focus at VyFi is to build an ecosystem with in-built longevity. The manner in which we propose to solve the issue of longevity within defi is through the application of our emission rate - with initial farm being offered over a period of 21 years, with remaining supply to continue thereafter. The first years emissions rate has been halved, this has been done based on community vote.

The emission's rate, broken down by year is as follows:

Emission year	Emission rate (millions)	% of supply total supply
0	17.556	4.52%
1	30.983	6.89%
2	27.884	6.20%
3	25.096	5.58%
4	22.586	5.02%
5	20.328	4.52%
6	18.295	4.07%
7	16.465	3.66%
8	14.819	3.29%
9	13.337	2.96%
10	12.003	2.67%
11	10.803	2.40%
12	9.723	2.16%
13	8.750	1.94%
14	7.875	1.75%
15	7.088	1.58%
16	6.379	1.42%
17	5.741	1.28%
18	5.167	1.15%
19	4.650	1.03%
20	4.185	1.09%

The time for year 0 will begin from the moment our first farms launch (to be announced). Let's have a look at this emission as a chart:



We can see that the emission decrease slows down over time, but this is done gradually over years, rather than months as we see with most defi projects.

Reasoning behind the emission

Our simple principle is to create an environment, as much as possible, where the demand curve does not over-burden that of supply. As a percentage of total tokens, we will see 28.21% of the total supply released over the first five years. This amounts to 102,662,300 vyfi in circulation due to farming at that time. This would equate to a little over half of Pancake Swaps' supply in one year. We hope that by creating a more limited cap on supply that we will be able to hold a more steady value, and thus a more consistent rate of return for our users and community.

The Numbers

Our function is simple. Every year, we release 10% less than the year before - beginning at year 0 with 10% of the farming supply (vyfi over the first year of farm). This is a recursive function, and explains why we begin at year 0. The formula for this recursion on an **annual basis:**

$$H_{y+1} = 0.9 \cdot H_y,\ where\ H_0 = 38250000\ (10\%\ of\ farming\ supply)$$
$$H_y = Harvest\ on\ year\ y$$

The adjustments will actually be taking place on a monthly basis, and thus can be generalised to a monthly basis if we adjust this recursive function for this. The following formula on a **monthly basis:**

$$H_{m+1} = \frac{49583}{50000} \cdot H_m,\ H_0 = 3187500\ (\text{The emission for month } 0)$$
$$H_m = Harvest\ on\ month\ m$$

Final Notes

These functions represent the emissions rate of vyfi. After the initial 21 year supply, there will still be 14.41% of supply remaining to be released through farm. If the governance so chooses, this function can continue, and we would see ourselves reach a point of less than 1,000,000 vyfi a year after about 35 years. This gives a long time-frame over which vyfi can be farmed, promoting long term users and engagers of our system.