

Vanillacoin: Proof-of-Work Reward v2.

Abstract

In this document we propose a change to the Proof-of-Work reward system that maintains the integrity of the original white paper[1] while reserving 40% of the money supply for long term network incentive purposes.

Background

When Vanillacoin was released it had no node incentive mechanism. Because the original Proof-of-Work specification states that "The miner reward is adjusted in a way that a majority of all coins will be mined within the first 5 years." [1] by the year 2020 there will be no rewards left for incentive nodes.

General Overview

In order to maintain the node incentive system long term 40% of the money supply must be reserved in a way that doesn't negate the original white paper in regards to:

1. Total Money Supply
2. 1% Inflation by year five.

The percentage "40" is derived from the fact that the peak incentive reward currently in place is 40% of the Proof-of-Work reward.

Solution

1. Create long term reserves for incentive purposes.

We propose to cut the Proof-of-Work rewards in a way that doesn't cause immediate shock to the market but declines rapidly enough to reach 1% annual inflation by year 2020 while also retaining 40% of the money supply for long term Proof-of-Work mining ensuring the incentive systems remain funded past year 2020.

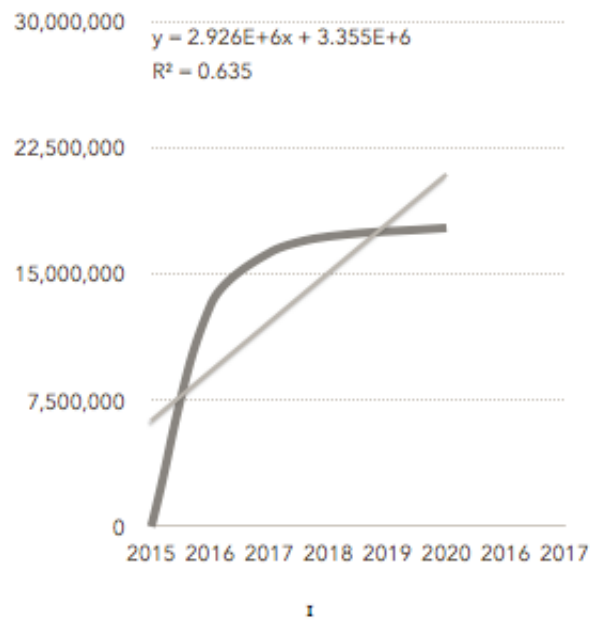
Example:

```
for (auto i = 10000; i <= height; i += 10000)
{
    subsidy -=
        subsidy / 28 - ((double)(10000.0f / height) *
            ((double)(10000.0f / height)))
    ;

    subsidy -= (subsidy / 28 * 4) / 28;
}
```

Money Supply Curve

2015	0
2016	13,099,198
2017	16,246,330
2018	17,086,066
2019	17,410,023
2020	17,725,383



Security Considerations

None

Conclusion

With our proposal we have satisfied the requirements which are essential for ensuring the incentive systems remain funded beyond year 2020 while retaining the existing total money supply and still achieving 1% inflation by year 5.

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Public Key:

```
047d3cdc290f94d80ae88fe7457f80090622d064757
9e487a9ad97f77d1c3b3a9e8b596796eb23a78214
fc0a95b6a093b3f1d5e2205bd32168ac003f50f4f557
```

Contact:

```
BM-NC49AxAjcqVcF5jNPu85Rb8MJ2d9JqZt
```

References

1. <http://vanillacoin.net/papers/vanillacoin.pdf>

Draft Revision 01 (Stage: Proposal)