

# Vanillacoin: Proof-of-Work Reward v2.

## Abstract

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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[2] purposes.

## Background

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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[2].

## General Overview

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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

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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.

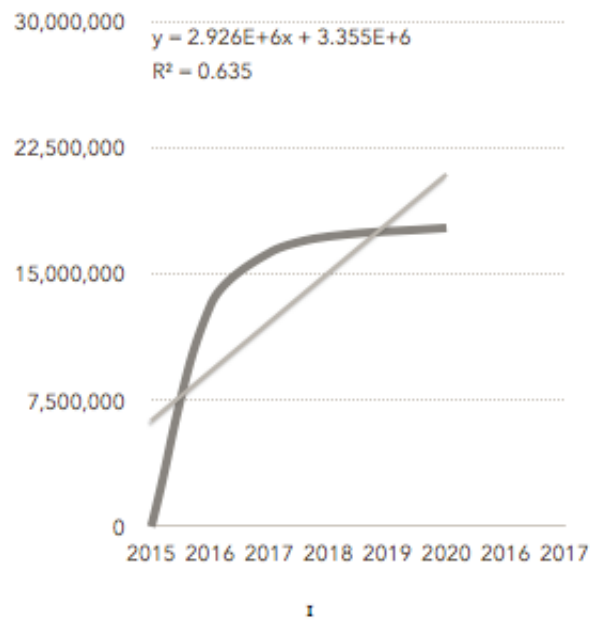
Example:

```
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

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None

## Conclusion

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With our proposal we have satisfied the requirements which are essential for ensuring the incentive systems[2] remain funded beyond year 2020 while retaining the existing total money supply and still achieving 1% inflation by year 5.

# Author

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Public Key:

```
047d3cdc290f94d80ae88fe7457f80090622d064757
9e487a9ad97f77d1c3b3a9e8b596796eb23a78214
fc0a95b6a093b3f1d5e2205bd32168ac003f50f4f557
```

Contact:

```
BM-NC49AxAjcqVcF5jNPu85Rb8MJ2d9JqZt
```

# References

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1. <http://vanillacoin.net/papers/vanillacoin.pdf>
2. [https://github.com/john-connor/papers/blob/master/node\\_incentives.pdf](https://github.com/john-connor/papers/blob/master/node_incentives.pdf)

Draft Revision 01 (Stage: Proposal)