Agenda

- Welcome
- Background
- Proposal to remove supercharge rewards
- Q & A
- Close

MIP process


Draft
... Sun 4 Dec
Review
Mon 5 - Sun 18 Dec
Last call
Finalisation
Mon 19 - Fri 23 Dec

MINA Improvement Proposal

MIP 1: Remove Supercharged Rewards

MIP to remove the short-term incentive of supercharged rewards.

- https://github.com/MinaProtocol/MIPs/blob/main/MIPS/mip-remove-supercharged-rewards.md
- https://docs.google.com/presentation/d/1KBelKm7mhu4Ty0hbmMsZsdDj2QcHz_p4sqIrvD6J6is/edit?usp=sharing

Overview

- What are supercharged rewards?
- Rationale for removing supercharged rewards.
- Expected outcomes of implementing MIP 1.
- Alternative or additional changes to tokenomics (e.g. fee burning, reduced/dynamic coinbase).
- Q&A / Discussion.

What are Supercharged Rewards?

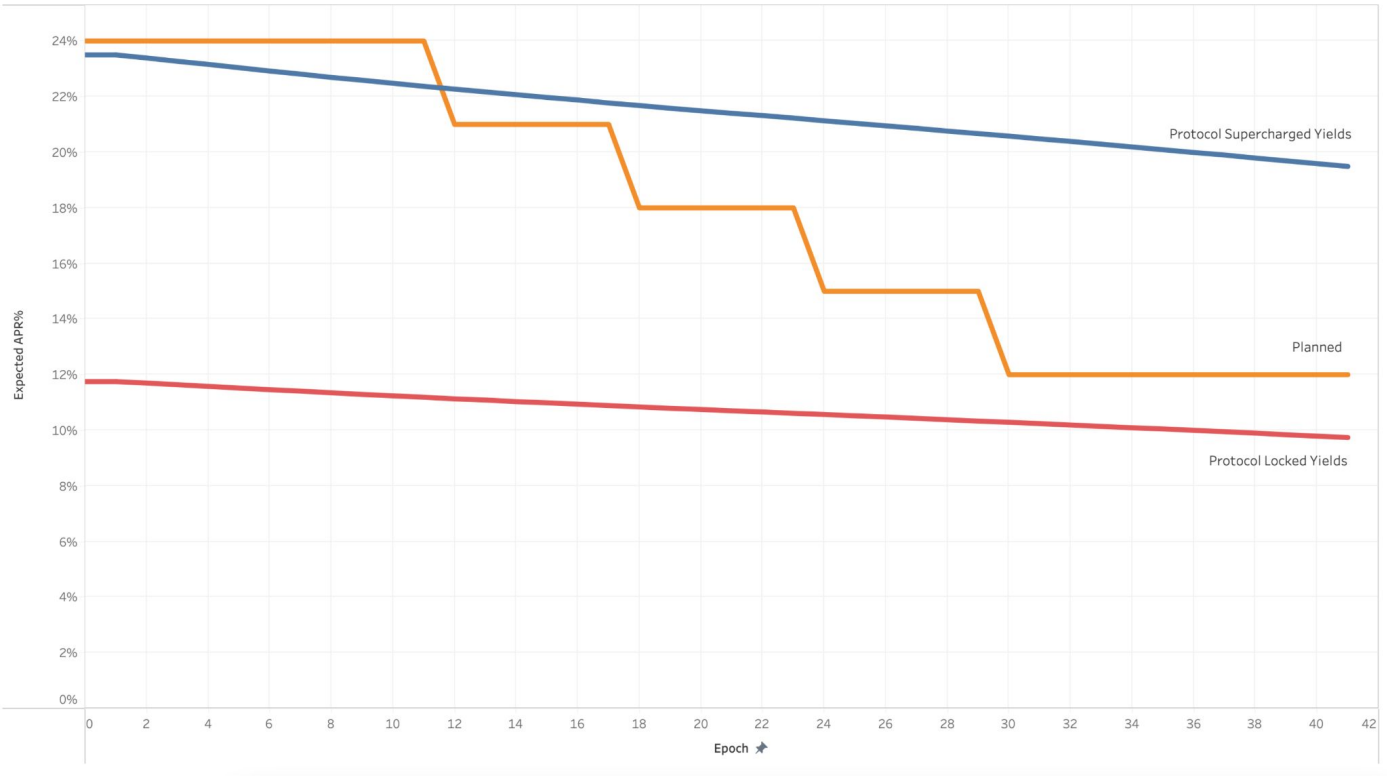
Mina Protocol is designed to provide extra block rewards (i.e., Supercharged Rewards) to block producers that stake with unlocked tokens during the first 15 months after launch.

Ref: https://minaprotocol.com/blog/mina-token-distribution-and-supply

How are they implemented?

- Supercharged rewards are implemented via a constant **`supercharged_coinbase_factor`**, which is currently **2** such that the coinbase rewards for supercharged rewards are always twice the coinbase for locked tokens (**720** & **1440** respectively).
- If this MIP is implemented, the return for locked and unlocked tokens will be the same.
- Without this MIP, supercharged rewards will continue to accrue to unlocked token holders, thereby increasing the planned inflation rate of the network relative to that initially proposed.

Proposed Schedule



Risks

- Security concerns due to a potential reduced staking rate.
- Economics of block production - potential centralization risk.

> O(1) Labs has previously determined 75% participation to be a threshold for ensuring maximal security of the network

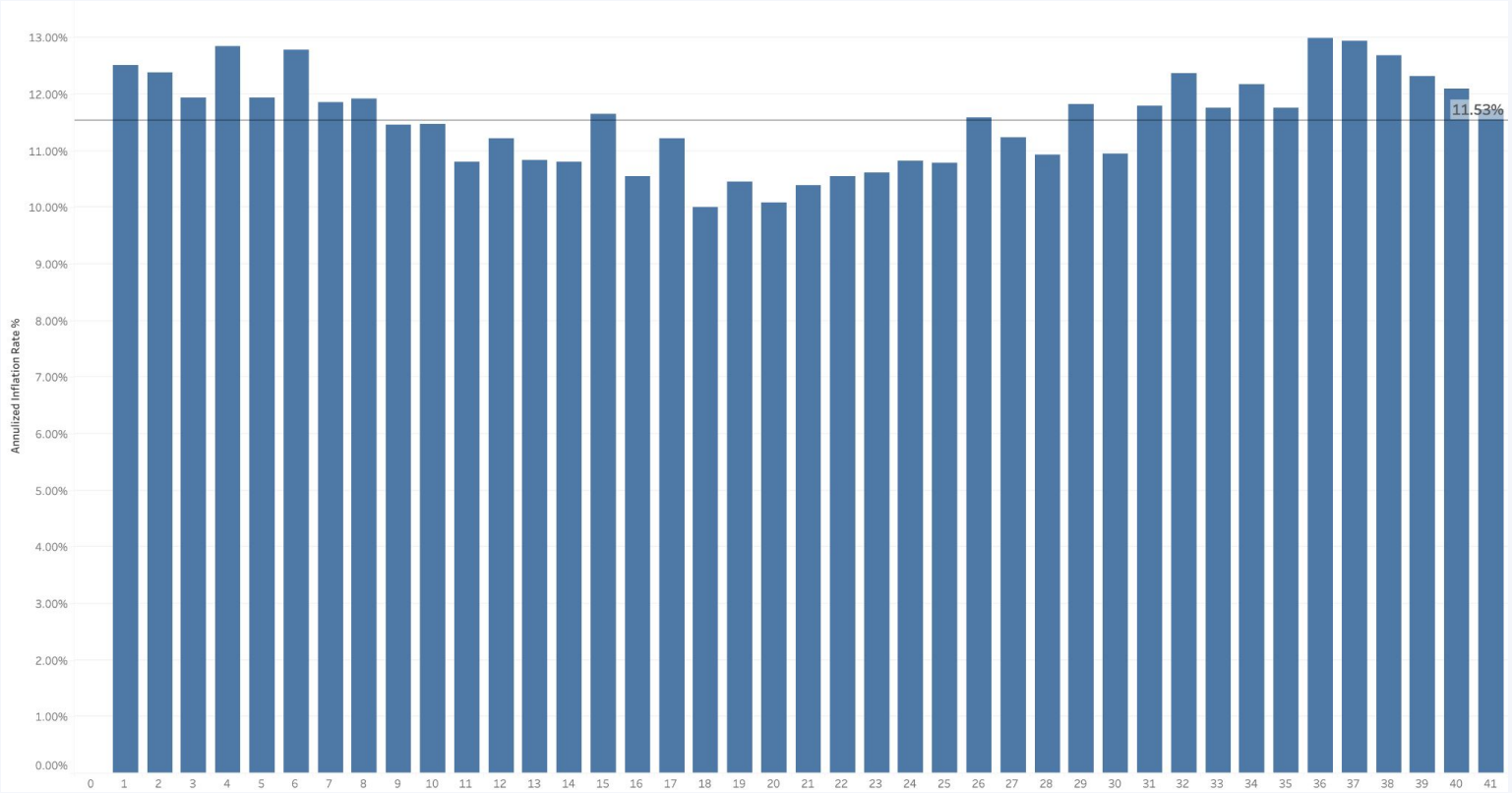
Ref: Evan Shapiro on Mina Research

Current Staking Rates

Epoch	Active Stake	Total Currency	Staking Rate*
0	752,536,881	805,385,693	93.40%
1	751,863,439	805,385,693	93.40%
2	755,814,399	808,975,534	93.40%
...	...	...	...
37	777,807,308	951,002,968	81.80%
38	794,336,958	956,037,561	83.10%
39	799,057,567	961,075,604	83.10%
40	802,958,437	966,042,291	83.10%
41	807,687,555	970,887,589	83.20%

* Estimate is a lower bound on the staking participation rate.

Current Inflation Rate



Expected Inflation if MIP 1 Implemented

Current	Expected
~12%	8.5%-9.7%

- 8.5% is based on current fill rate of 66%.
- 9.7% is upper bound and assumes 7140 x 0.75 blocks per epoch and 24.54 epochs/year.
- Estimate based on current epoch (42) total currency, and will continue to decline.
- Locked holders expected APR sees no change (9.7%) at hard fork.
- Unlocked token expected APR drops in half (19.4%->9.7%).

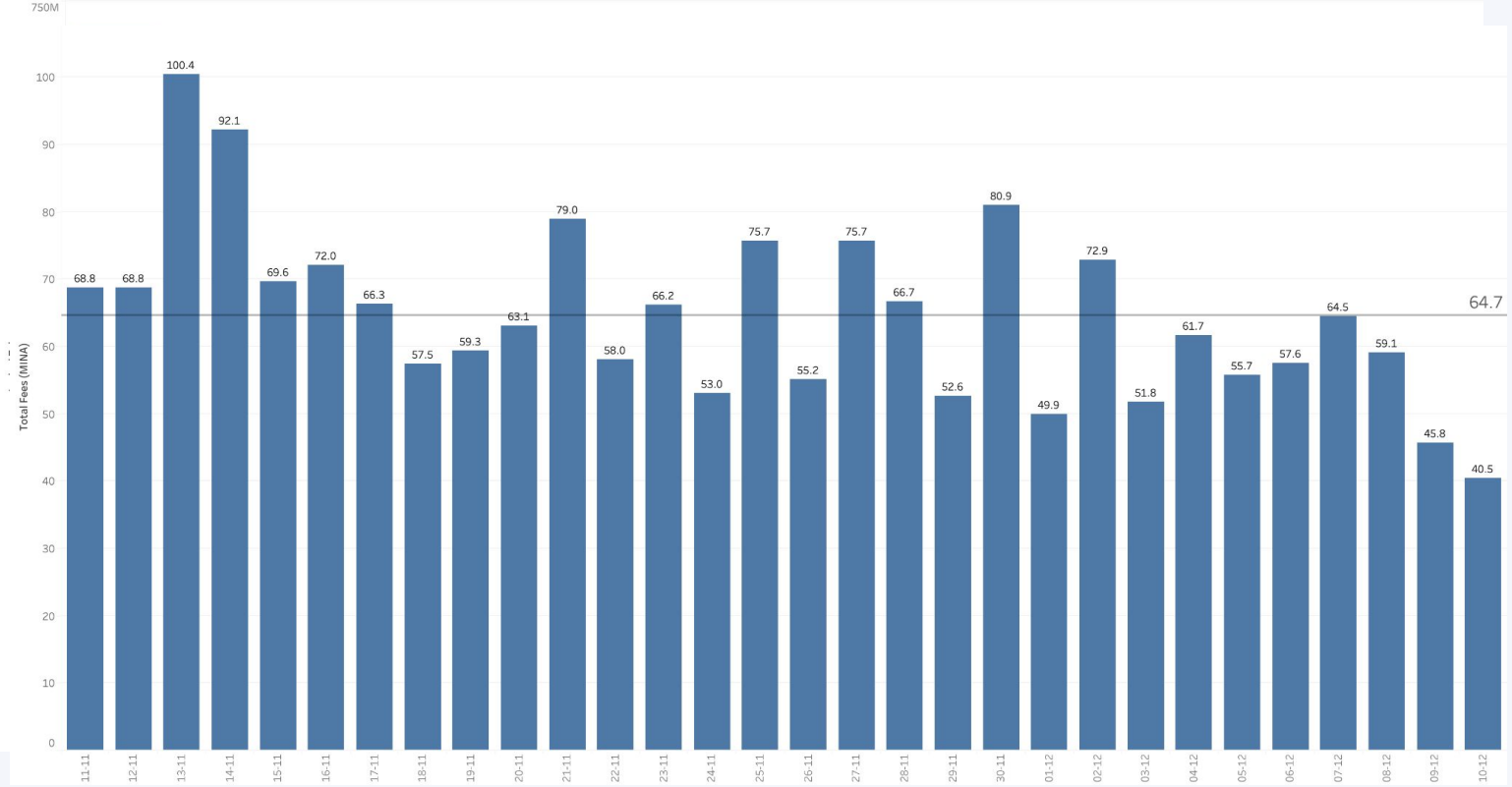
Alternatives: Forum proposal

Proposed Target Block Rewards Schedule										
	H1 2021	H2 2021	H1 2022	H2 2022	H1 2023	H2 2023	H1 2024	H2 2024	H1 2025	H2 2025
BR	720	720	720	700	675	650	600	550	500	450
Estimated BR yield	12%	11%	10.5%	9.5%	8.75%	8%	7.25%	6.5%	5.75%	5%
SCR	1440	1440	1235/1070	N/A						
SCR yield	24%	22%	18%/15%							
Fees burned*	0%	0%	0%	0%	10%	10%	20%	20%	40%	40%

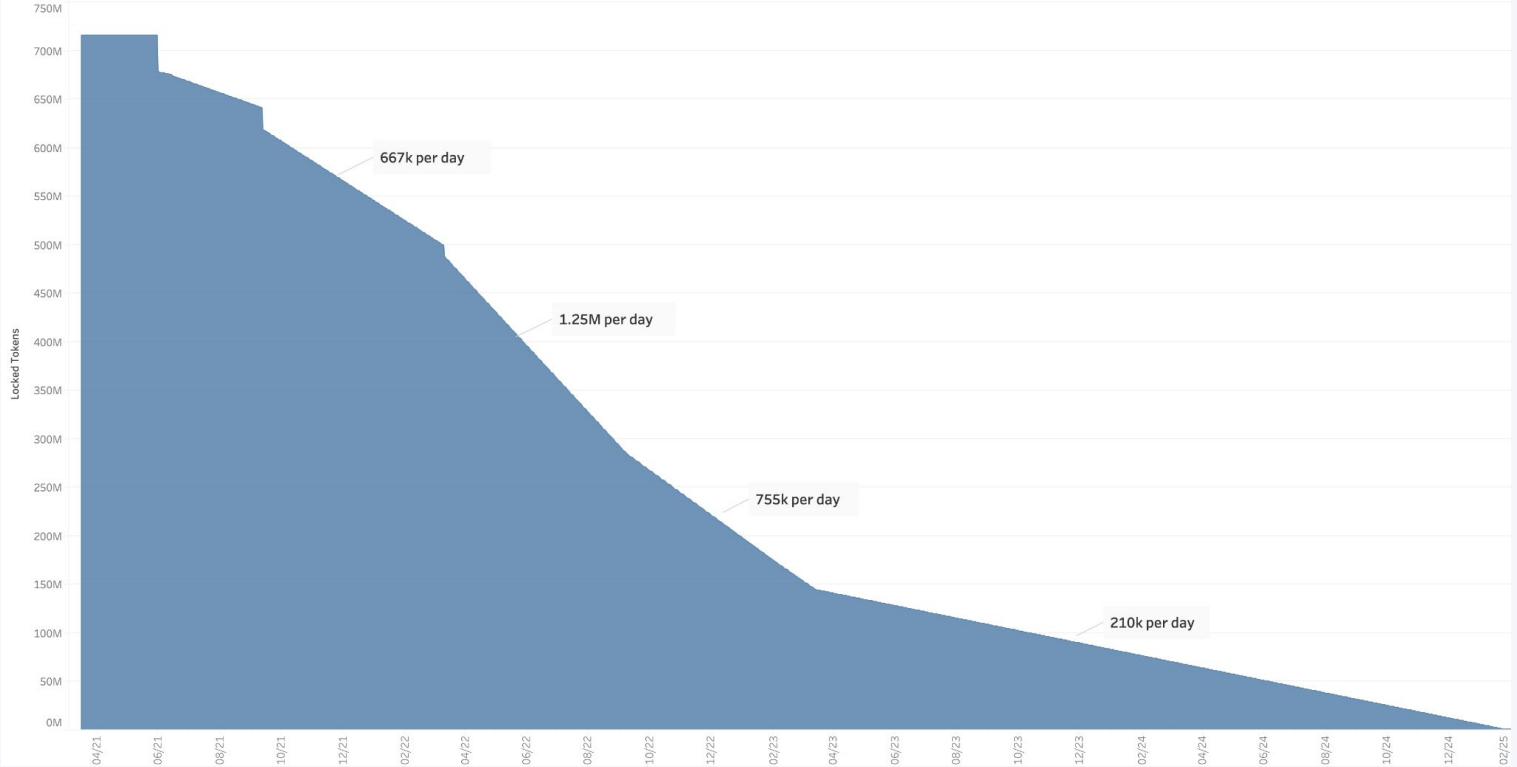
* with fee burning increasing 20% each year until 80% burned is reached 2027

Ref: Evan Shapiro on Mina Research

Fee Burn (last 30 days)



Locked Tokens / Circulating Supply



Summary of MIP 1

- Removes the (temporary) additional bonus of supercharged rewards so all coinbase rewards will be 720 MINA.
- Simplest possible implementation for a change in the tokenomics.
- Will reduce inflation rate from ~12% to ~8-9%.
- Reduces block reward APR% for unlocked tokens from ~19.4% to ~9.7%.
- Can be the first stage of implementing other tokenomics changes e.g. fee burning, dynamic coinbase, reduced coinbase etc...
- Doesn't affect the circulating supply increase.

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Q&A

Find more information

Github
https://github.com/MinaProtocol/MIPs/blob/main/MIPS/mip-remove-supercharged-rewards.md

Mina Research:
https://forums.minaprotocol.com/t/reduce-supercharged-rewards-in-line-with-initial-tokenomics/4540/29

Discord: #minaresearch channel