



Litepaper

# Abstract

In the last few years, decentralized finance (DeFi) has grown rapidly. A wide range of financial applications have been launched, including collateralized lending (Aave), decentralized exchanges (Uniswap), and prediction markets (Augur). These successful financial experiments have shown us that DeFi's core elements lie somewhere in between the financial fundamentals – everyday borrowing and lending activity and the use of savings accounts.

With the mission of promoting decentralization and accessibility — as well as earning staking rewards on top — liquid staking protocols will grow in parallel with the greater DeFi movement. We see liquid staking as DeFi in its purest form and stablecoins as the safest storage of value for growing and preserving wealth.

As they provide a convenient and low-cost way to conduct blockchain transactions that favors the majority of the average users, stablecoins have grown from relative obscurity to a market worth more than \$150 billion in a few short years. With recent events, we realized the best existing solution is a decentralized, overcollateralized stablecoin.

In order to make stablecoins a staple of the future of finance and humanity, Sikka protocol aims to address such security and sustainability issues by combining stablecoin convenience with methods used by traditional finance institutions to protect wealth. Through Sikka protocol's lending service, users can borrow the Polygon-based stablecoin SIKKA by providing overcollateralized liquid staking assets in the form of MATIC.

# An Introduction to SIKKA Protocol

Central banks establish a fiat currency reference rate. Meanwhile, crypto economies such as Ethereum, MATIC Chain, Polygon, and similar chains established staking incentives for their own currency, which functions as a benchmark rate for their crypto economies. The objective of Sikka Stablecoin is to become the facilitator of a stablecoin market's reference rate.

The basic purpose of Sikka Protocol is to provide competitive yield in a sustainable way, enabling the majority of users to profit from the increased money velocity of crypto markets.

## The primary sources of SIKKA base yield will be:

- Interest on borrowing
- Proof-of-Stake procedures creating income.
- Liquidity pool transaction fees

DeFi composability would allow SIKKA liquidity providers, and subsequently, SIKKA stakeholders, to increase yield in a sustainable way through integration with other lending platforms.

Sikka is a protocol that allows users to earn yield on a stablecoin (SIKKA) backed by liquid-staking MATIC. It's a layer-2 smart contract platform that's Polygon-compatible and optimized for DeFi with built-in liquidity and ready-made financial applications. With its decentralized stablecoin (SIKKA), MATIC Liquid Staking, borrowing, yield farming, and stablecoin staking. Sikka helps crypto holders unleash the maximum potential of Polygon and the full power of MakerDAO.

Sikka's MATIC Liquid Staking feature allows users to stake their MATIC while accessing its liquidity. When MATIC is staked on SIKKA, users receive SIKKA, a liquid, yield-generating stablecoin that not only represents the staked MATIC value and is redeemable at any time but also contains the ever-increasing staking rewards.



# SIKKA – A Stablecoin Poised for Growth

With the growth of DeFi over the last several years, a diverse spectrum of stablecoins employing various strategies to stabilize their price vs. USD has arisen and been included in various DeFi protocols.

The rapid emergence and evolution of cryptocurrencies over the past 15 months has been largely attributed to the increasing number of institutional investors and widespread adoption. Bitcoin hit a record high of \$64,863 last month. However, other digital currencies have also outpaced it.

One of the most popular digital currencies in the world is the Polygon token. At the time of writing, MATIC has a market cap of \$13.39 billion. The price of the token has been fluctuating between \$0.00176 and \$2.68.

Due to the increasing number of transactions being processed on the MATIC network, it has been estimated that the platform has processed over 120 million transactions in just a couple of months. One of the main factors that have been contributing to the rise of the Polygon token is its low transaction costs.

Sikka will capitalize on Polygon's multiple use cases, releasing a stablecoin on the Polygon chain allowing users to build a stable passive income. By offering benefits beyond staking earning rewards. Sikka will avoid slashing as well as the locking of user tokens, which should attract more investors in the long term. Sikka Protocol is creating a decentralized stablecoin (SIKKA) backed by liquid-staking MATIC, inspired by MakerDAO. It intends to use MakerDAO to investigate an alternate product market for DAI.

# How SIKKA Compares Against Other Stablecoins

| Type of stablecoin           | Flat-based   | Collateralized Debt Position (CDP)   | Algorithmic  | Sikka   |
|------------------------------|--|--|--|---|
| Type of Collateral           | Fully collateralized                                     | Over collateralized  | Under collateralized   | Over collateralized   |
| Centralized vs Decentralized | Centralized  | Decentralized  | Decentralized  | Decentralized   |
| Accessibility to borrowers   | Permissioned   | Permissionless   | Permissionless   | Permissionless  |
| Appeal to borrowers          | Low  | High (low cost of borrowing)   | Medium (high cost of borrowing with incentives such as farming rewards)            | Medium (high cost of borrowing with incentives such as farming rewards) |
| Appeal to stablecoin hodlers | Limited  | Mixed. Yield requires interaction with several DeFi protocols based on farming rewards | High yield   | High, multiple digital yields   |
| Yield sustainability         | High   | Low  | Low  | High  |
| Price Stability              | Low-risk   | Medium/High risk (low borrowing cost applies selling pressure to stablecoin)           | High risk (algorithmic mechanism)  | Low/Medium (buying pressure from multiple digital yields)               |
| Stablecoin application       | High due to good integrations with centralized exchanges | Mixed/Low. Due to limited integrations with centralized exchanges                      | Mixed/High, due to high focus on integrators to enable savers to easily earn yield | Expect high utility with planned integration with Polygon               |

# Protocol and Features

Sikka is a cross-chain lending protocol on Polygon that allows users to borrow SIKKA stablecoins against their staked MATIC assets, and earn additional yields from the SIKKA yield-bearing stablecoin in a single debt position against a low interest.

## Borrowing Mechanics

Sikka protocol provides a secure and reliable way for users to collateralize their MATIC and borrow SIKKA stablecoins against it. When MATIC is deposited in a whitelisted Bancor pool, it generates aMATICc based on a real time ratio. aMATICc tokens are a special kind of “pool token” that represents the depositor’s part ownership of the pool while offering several additional features, including allowing the staker to borrow SIKKA stablecoins at a collateral ratio determined by the governing users. It’s a reward bearing token so it’s expected that aMATICc price will rise.

With Sikka, users can borrow against their portfolio of MATIC assets at a low interest. They need to deposit MATIC onto the Sikka protocol to borrow SIKKA, an overcollateralized hard-pegged stablecoin. Depositors are able to borrow SIKKA to either stake, provide liquidity, or obtain governance IKKA tokens.

Users will have the option to directly deposit SIKKA in vaults provided on Sikka’s farming page, which will direct SIKKA to liquidity pools with competitive APYs. Alternatively, users can choose to swap SIKKA on external DEXs to get leverage on their desired assets and swap back to SIKKA when they want to repay the loan.

## Yield

Sikka accumulates yield from 3 primary sources: borrow interest, liquid staking rewards, and swap fees from deposits into liquidity pools on DEXs. This combination maximizes potential yields because it covers various use case scenarios. Interest and swap fees will be driven by protocol usage as well as the supply and demand balance. At the same time, Proof-of-Stake Liquid staking rewards will be generated as a result of the economic activity on-chain. Such diversified activity ensures that network validators staking native tokens keep on generating yield as more transactions occur.

This sustainable yield generation mechanism creates a dynamic where Sikka produces stable and consistent risk-adjusted returns. When the yield is transferred to the borrower, upon the collateralized MATIC, the yield risk/reward ratio improves further. This creates a flywheel effect, increasing the interest and swap fees generated by the Sikka protocol.

## Liquidation

To ensure SIKKA remains fully backed by MATIC collateral, pools that fall under the minimum collateral ratio of 130% will be closed (liquidated) and have the debt paid back externally or redistributed.

The debt of the pool is canceled and absorbed by the Stability Pool and its collateral is distributed among Stability Providers.

The owner of the pool still keeps the full amount of SIKKA borrowed but loses part of its value overall hence it is critical to always keep the ratio above 130%, ideally above 150%.

Anyone can liquidate a pool as soon as it drops below the minimum collateral ratio of 130%. The liquidator receives gas compensation as a reward for liquidation.

# Ensuring Liquidity

**Sikka protocol faces two main liquidity challenges. Maintaining:**

1. SIKKA stablecoin liquidity
2. MATIC Liquid Staking liquidity

Maintaining liquidity for both tokens is important to keep the peg of SIKKA stablecoin with USD and the MATIC Liquid Staking peg with MATIC token.

To ensure SIKKA stablecoin liquidity, most of Sikka Revenue Pool will be composed of SIKKA borrowing interest collected from borrowers. MATIC staking rewards from MATIC collateral will also be accumulated in the Sikka Revenue Pool. The revenue pool will distribute rewards to SIKKA stakers. In fact, one of the main benefits of SIKKA is the ability to earn Sikka staking rewards from the Sikka Revenue Pool, whereas the buying pressure will require a sufficient amount of liquidity to avoid SIKKA trading at a premium for a prolonged period of time.

To ensure MATIC collateral liquidation and collateral withdrawal, users will face an unbonding time of 3-4 days similar to MATIC Liquid Staking, or receive a MATIC Liquid Staking token immediately after the withdrawal and rely on MATIC Liquid Staking liquidity.

With MATIC Liquid Staking the unbonding period is 3-4 days, and the peg is expected to remain strong due to market makers' willingness to get MATIC Liquid Staking tokens at a discount and cash out their profits after the unbonding period.

To contribute to maintaining the MATIC Liquid Staking liquidity, the Sikka team will upgrade its yield converter to allow for deposited MATIC staking into MATIC Liquid Staking (e.g. 80% MATIC Liquid Staking / 20% MATIC). This will permit MATIC collateral withdrawals or liquidation in MATIC tokens. It might reduce the amount of revenues in Sikka Revenue Pool, but it expect to benefit the protocol in the long run by significantly increasing MATIC liquidity.

# Price Stability Mechanism

The Sikka Protocol uses a rebase mechanism to keep the market price (mp) of 1 SIKKA equal to the target price (tp). When experiencing disruption, and SIKKA's market price does not perfectly reflect the US Dollar, it must reconcile to reach a state of equilibrium:

**When SIKKA exceeds \$1, the supply of SIKKA must be expanded.**

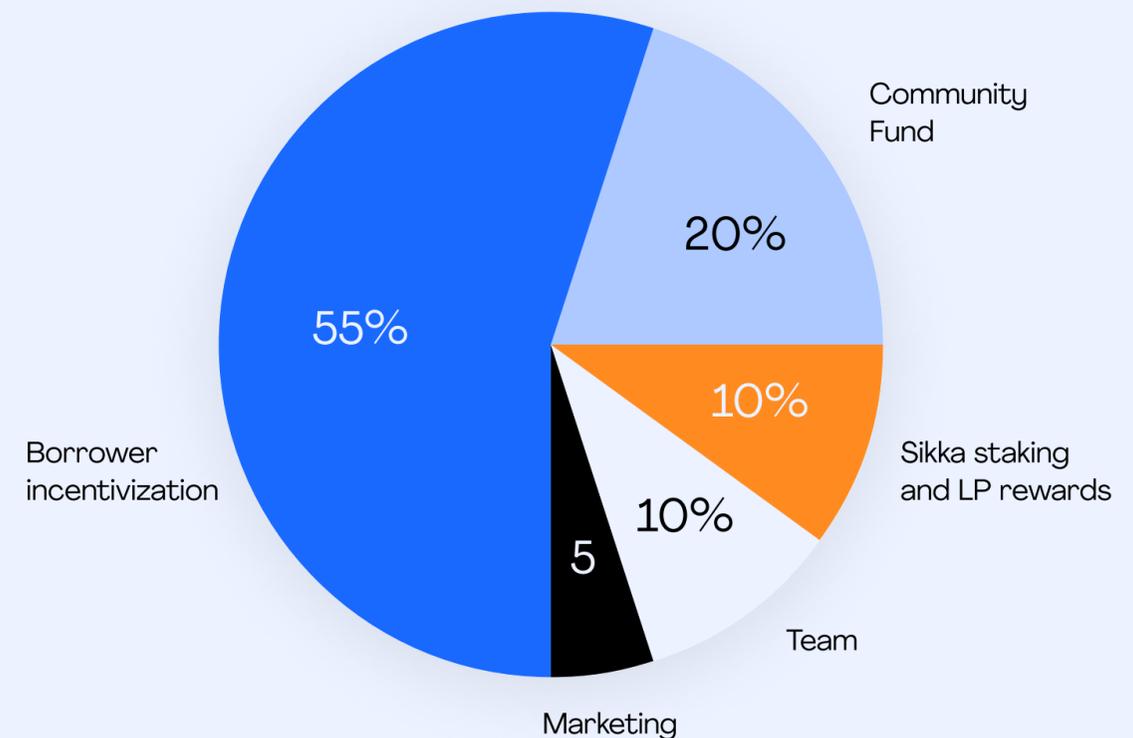
- Borrowers are driven to borrow more SIKKA to sell for other assets since SIKKA is at a premium.
- Sikka will cut SIKKA farming benefits by lowering SIKKA borrowing interest to lessen demand for SIKKA farming.

**When SIKKA reaches \$1, the supply of SIKKA must be limited.**

- Borrowers are motivated to purchase SIKKA from the market to repay the loan since it is at a discount.
- Sikka will raise SIKKA borrowing interest to reduce SIKKA borrowing demand, which will improve SIKKA farming rewards.

The Sikka Protocol rebase system is designed to create a system that is fair to most users. Our method ensures that there is no unequal rebase distribution due to the difference in time zones. Thus, creating a fair opportunity for trading and arbitrage for all users globally.

# Token Distribution



# Sikka Protocol Timeline

Development and release of new features and functions will be carried out in phases to continue

We are positioning Sikka as a widely utilized decentralized stablecoin protocol and trusted reference rate enabler in the crypto market with a combination of unique features and by capitalizing on Proof-of-Stake (PoS) incentives from liquid-staking assets.

1

## Take over the MATIC Chain

- Increase SIKKA adoption by collaborating with DeFi protocols on MATIC Chain and influencing reward emission using native tokens from multiple DeFi protocols.
- Maintain peg by actively incentivizing with IKKA tokens SIKKA liquidity pools across Decentralized Exchanges.
- Allow other DeFi projects to build on top of SIKKA and uncover DeFi composability potential, allowing SIKKA stakeholders to increase their returns.
- Increase SIKKA supply to \$1 billion.

2

## Governance and Expansion

- Turn on the SIKKA single-stake pool.
- Sikka Protocol is being extended across many chains.
- Start the Sikka community governance process.
- Other Proof-of-Stake (PoS) tokens may be used as collateral.

3

## Widespread Adoption

- Get listed as basic pairs on centralized exchanges.
- Integrations with popular FinTech apps for daily use.

# SIKKA vs IKKA Tokens

SIKKA utilizes a two token system — SIKKA and IKKA.

SIKKA is the USD-pegged stablecoin used to pay out loans on the SIKKA protocol. At any time it can be redeemed against the underlying MATIC collateral at face value.

IKKA is the secondary token issued by SIKKA. It captures the fee revenue that is generated by the system and incentivizes early adopters and SIKKA holders. IKKA token is the Sikka Protocol's governance token, managing Sikka Revenue Pool distribution and IKKA token rewards.

The IKKA token will fulfill various functions

- Users can borrow SIKKA to earn more IKKA while also accruing IKKA over time.
- IKKA can be used to boost SIKKA rewards for liquidity pool staking
- Voting power

SIKKA represents **a quantum leap** forward in the stablecoin/liquid staking landscape.





Thank you!