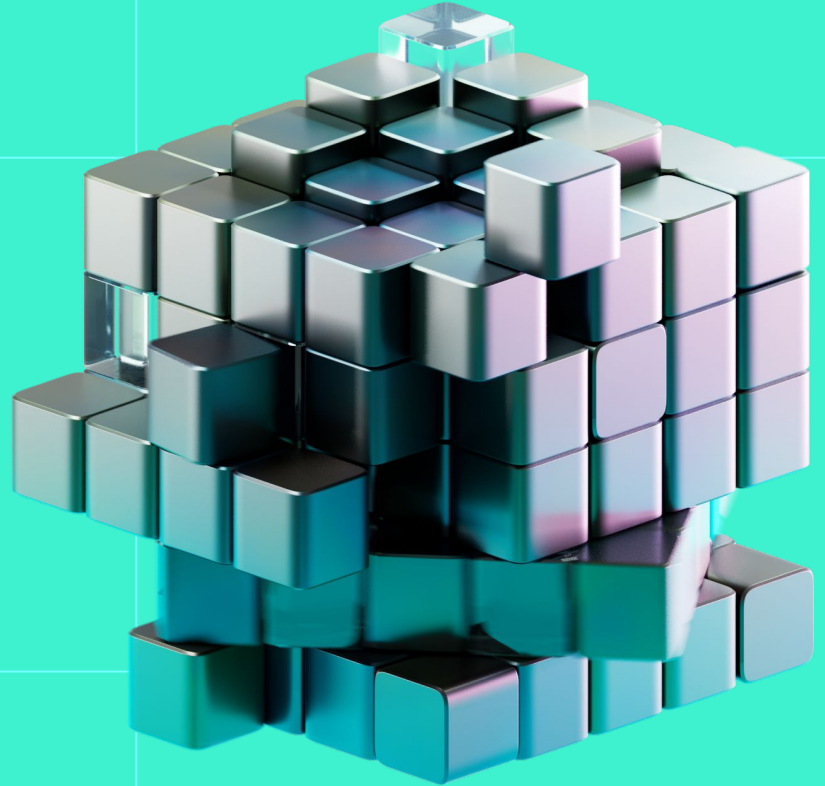


HACKEN

June 2024

Mina Tokenomics Proposal

We Make Web3 a Safer Place



1. Overview

2. Methodology

3. Deliverables & Team

4. Duration & Budget



Overview

Hacken Services



Smart Contract Audit [↗](#)



Proof of Reserves Audit [↗](#)



Blockchain Protocol Audit [↗](#)



CCSS Audit [↗](#)



dApp Audit [↗](#)



Tokenomics Audit And Design [↗](#)



Penetration Testing [↗](#)



ISO 27001 Audit



Bug Bounty Program [↗](#)

Transparent Pricing



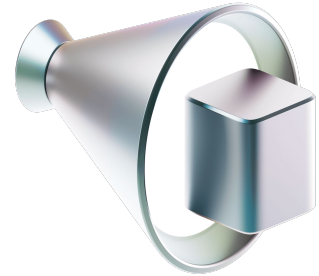
Strengthen customer confidence

Web3 Trust



One of the world's first audit of digital asset security

Lowest Incident Rate



Increase competitiveness

Methodology

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Tokenomics Audit

A thorough, independent audit of protocol economic security ensuring token model robustness and efficiency and conveying trust to investors and community



Agent-based modeling

The most advanced and complex type of tokenomics modelling. Identifies system components, simulates interactions, and ensures efficient system design and functionality

Game Theory

Provides insight into human behavior, ensures trust through algorithms, and enhances security and reliability

Edge Cases

Considers hypothetical scenarios to identify potential system failures, enhancing system reliability and robustness

Structural Analysis

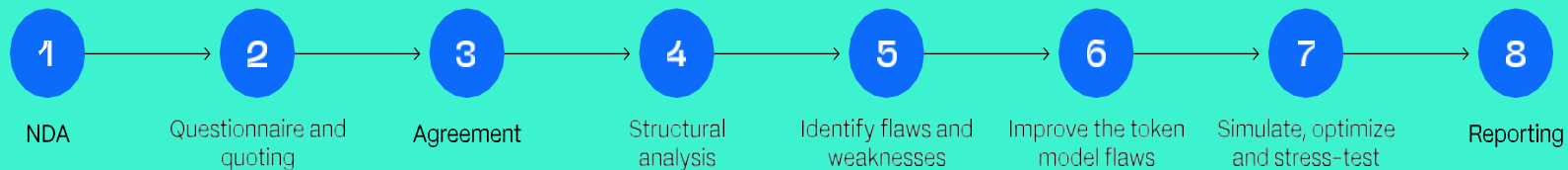
Breaks down relationships and incentives, identifies problems, and ensures optimal system design and efficiency

Empirical Analysis

Uses data from other protocols to validate system design, understand real-world behavior, and identify potential issues

Numerical Price Models

Generates price projections to confirm token value appreciation, ensures a stable and profitable tokenomics model



Deliverables & Team



Stylianos Kampakis
Project's Lead



Linas Stankevicius
Delivery Manager



*Researchers Team Led
by* **Yves Toiser**

Stylianos Kampakis

Tokenomics Team Lead

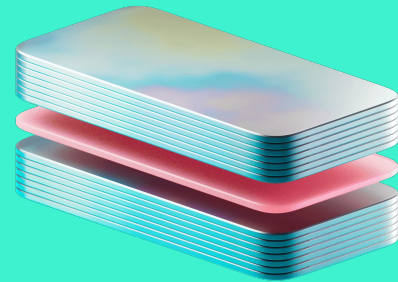
- PhD in Computer Science from University College London
- Member of UCL Blockchain Centre and Cyprus Blockchain Centre
- In tokenomics since 2017
- Amongst the first to suggest the use of agent-based modelling in tokenomics
- Originator of tokenomics auditing
- Multiple books in the space of AI & Data Science



Steps:

- Structural review of current Mina token economy (agents, emissions, incentive structures, fees, value capture).
- Identify what economic elements are missing (e.g. value capture) for the upcoming changes in Mina ecosystem (zkApps, L2s, token issuance, etc.).
- Gather on-chain data and use statistical modeling of supply and price dynamics: use an array of data science algorithms to understand how inflation affects Mina's price. Use this information in further stages and simulations.

Deliverable: A thorough report on the current Mina token economy model.



Steps:

- Discuss with Mina Foundation and pick 4-7 competitive protocols for research focusing on critical aspects identified in Stage 1 e.g. fees, inflation, incentives, value capture.
- Identify empirical proofs from competitors analysis: what worked, what failed, risks, and success stories.
- Based on benefits-risks analysis pick the most suitable solutions and include them in next stage simulations.

Deliverable: Document on why to choose solutions from other protocols based on benefits-risks analysis.



Steps:

- Gather Mina's community feedback that will be used for final reporting and simulations.
- Use stochastic/agent-based and game-theoretic simulations using Python and the TokenLab open-source token economy simulation library, in order to assess the viability of the suggested mechanisms (fees, incentives, emissions).
- Combine all stages' findings and Mina's Foundation and community feedback into one comprehensive and actionable document.

Deliverable: A final report with actionable and concrete recommendations



Duration & Budget

Timeline

- Discovery (4-6 weeks)
- Comparisons & Benchmarking (4-6 weeks)
- Simulations & Reporting (4-6 weeks)

Budget

- 33% paid as deposit for discovery kick-off
- 33% paid after stage 2 report completion
- 33% paid after stage 3 final document completion

Total: \$65,000

Thank You