

1. Introduction

Soteria Network is a next-generation Layer 1 blockchain built to empower individuals, businesses, and communities through secure, scalable, and energy-efficient decentralized infrastructure. Our mission is to democratize access to blockchain technology by enabling anyone – regardless of technical background – to launch their own blockchain with ease.

2. Vision

We envision a cryptocurrency ecosystem that transcends borders, fosters financial inclusion, and protects wealth from inflation. Soteria is designed to bring real value, utility, and long-term sustainability to holders, investors, and builders alike.

3. Core Principles

- **Decentralization**: Powered by Proof-of-Work (PoW), Soteria ensures transparent and permissionless consensus.
- **Security**: Built with the SoterG algorithm – a 12-function dynamically rotating hash suite – offering robust protection and ASIC resistance.
- **Sustainability**: Engineered for energy efficiency using empirical benchmarks and GPU-friendly mining.
- **Accessibility**: Designed for non-technical users to launch custom blockchains via a no-code platform.

4. Technical Specifications

Parameter	Value / Description

Block Time	12 seconds
Block Reward	0.1 SOTER per block
Daily Emission	~1,000 SOTER
Monthly Emission	~30,000 SOTER
Year 1 Emission	~365,000 SOTER (50% locked for long-term)
Max Block Size	3 MiB
Max TX Size	2 MiB
Coinbase Maturity	3,600 blocks
Difficulty Algorithm	LWMA3-EMA, retargets at 90, 120, 150, and 180 blocks
Orphan Rate	Reduced by up to 60% compared to similar block times
Sync Time	Up to 3× faster than traditional blockchains
Ticker Symbol	SOTER
Coin Name	Soteria
Maximum Supply	Dynamic – based on supply and demand

5. Blockchain Fundamentals & Consensus Rationale

Blockchain is a decentralized and distributed digital ledger technology. Transactions are recorded across a peer-to-peer network of computers, ensuring transparency and resilience. The term “blockchain” originates from its structure: individual records, known as blocks, are linked together in a chronological sequence – forming a chain.

Each block contains transaction metadata, including the timestamp, blockchain version, previous block hash, Merkle Root, a unique nonce assigned during mining, and the parties involved. Once added to the chain, a block becomes immutable – resistant to tampering, fraud, or deletion.

Key Benefits of Blockchain Technology

- **Decentralization**: Unlike traditional systems governed by central banks or authorities, blockchain operates without intermediaries. Transactions are validated by a distributed network, reducing the risk of centralization.
- **Money Transfer**: Blockchain enables fast, secure, and efficient fund transfers across borders.
- **Supply Chain Management**: It offers transparency and traceability, helping verify product authenticity and prevent fraud.
- **Cybersecurity**: Its immutable and decentralized nature makes it ideal for securing digital infrastructure.
- **Transparency**: Every action is recorded and visible to all participants, fostering trust.
- **Security**: Cryptographic mechanisms and distributed consensus make blockchain highly resistant to attacks.
- **Efficiency**: By removing intermediaries, blockchain streamlines operations like commodity trading and cross-border payments.

Why We Chose Proof of Work (PoW)

Soteria Network is free and open source. All coins are fairly issued and mined publicly using the SoterG algorithm – a GPU-friendly, ASIC-resistant Proof-of-Work (PoW) mechanism.

We chose PoW because it builds a time-based computational barrier that strengthens data integrity with each new block. This structure protects user data from future tampering and censorship.

The SoterG algorithm was selected over other PoW variants due to its resistance to ASIC dominance and its compatibility with commodity GPUs. This ensures a fairer mining landscape and prevents centralization by large mining farms.

Consensus and Network Coherence

Building a decentralized, censorship-resistant system introduces technical challenges. One of the most complex is maintaining a coherent global state across all nodes. PoW addresses this by enforcing consensus rules that reject invalid transactions and synchronize the network.

While performance doesn't scale linearly with node count, security improves as more nodes join. This enhances geographic connectivity and strengthens the network's resilience.

Operating a node is simple and empowers users with direct access to the network. It eliminates reliance on third-party services, improves privacy, and gives operators full control over their interactions with Soteria.

PoW also ensures fair distribution. Anyone with computing power can participate and earn block rewards. It provides an objective method to validate the chain without external dependencies.

5. Mining Model

Soteria uses a GPU-friendly PoW model optimized for speed and fairness:

- **SoterG Algorithm**: Combines 12 energy-efficient hash functions with dynamic rotation and timestamping.
- **Miner Allocation**: 30% of block rewards are allocated to miners.
- **Halving Strategy**: Mining rewards will reduce over time, with future transitions to PoS or merged mining to mitigate inflation and selling pressure.

Soterg Optimization

In testnet, mining contexts were allocated as 12 simultaneous stack structs per round, leading to high stack usage and potential instability. For mainnet, Soteria will allocate only one context per round, significantly reducing stack pressure, improving cache locality, and enabling future GPU offload and backend-agnostic dispatch. This change enhances performance, stability, and memory efficiency.

DAG size starts at 1GB, grows +350MB/year

Minimum GPU requirement: 1.5GB

Compared to other PoW chains starting at ~3GB, mining Soter is more accessible

6. Native Coin Tokenomics (\$SOTER)

The tokenomics of \$SOTER are meticulously crafted to ensure fairness, stability, and long-term growth. Its distribution model promotes inclusivity, while supply dynamics balance scarcity and liquidity. Innovative inflation/deflation mechanisms and the utility within the ecosystem further enhance its value proposition, fostering a thriving community and sustainable development.

Distribution Breakdown

Allocation	Percentage	Notes
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Miners	30%	Incentivizes secure and fair Proof-of-Work
Foundation Reserve Fund	10%	Long-term sustainability and strategic reserves
Exchanges	10%	Liquidity provisioning and listings
Marketing Fund	10%	Outreach, education, and global campaigns
Team Fund	5%	Core contributors and developers (vested)
Ambassador Program Fund	2%	Community evangelism and regional growth
Compensation Fund	2%	Operational and contributor compensation
Backers Fund	6%	Early supporters and strategic partners
Community Fund	2%	Grants, events, and community initiatives
Ecosystem Growth Fund	15%	Protocol development and dApp support
Airdrop Fund	2%	Community and testnet participant rewards

Contributors Fund	2%	Open-source and technical contributors
Node Operators Pool Fund	2%	Incentives for running full nodes
Staking Pool	1% → 4%	Grows to 4% at block height 2,000,000
Burn Pool	1% → 2%	Grows to 2% at block height 2,000,000

Staking and Holding

Soteria Network aims to enrich the lives of crypto enthusiasts by offering a currency that powers the entire ecosystem. Beyond mining, stakers and holders will be empowered through funding mechanisms and long-term incentives.

7. Multichain Architecture

Soteria supports both **UTXO** and **Account-based models**, enabling hybrid applications and cross-chain interoperability. This dual-layer design allows developers to build flexible dApps and financial tools without compromise.

Deployment Targets

Soteria will launch on:

Ethereum, Linea, Sonic, Optimism, zkSync, Avalanche, Mantle, Unichain, Arbitrum, Base, BSC, Polygon, Cronos Chain, Bera Chain, Blast Network, Gnosis Chain, World Chain, Hemi Blockchain, and Zora Blockchain.

All Soter-branded tokens will use a unified contract address system – the same contract address deployed across all chains for consistency and traceability.

Token Allocation & Economics

Soteria's multichain token system will launch in December across 19+ blockchains. The token distribution is designed to support long-term growth, liquidity, and community incentives.

Token Allocation Breakdown

Fund	Allocation	Purpose
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Launch Fund (locked 5 years)	15%	CEX listings, DEX liquidity
Ecosystem Soter Coin Fund	14%	Airdrops for testnet miners, long-term holders
Ecosystem Soter Token Fund	15%	Partnerships, incentives, development
Farm Fund	15%	Yield farming, staking, liquidity mining
Team Fund	6%	Core contributors (vested, locked)
Public Sale	30%	TGE for early investors and community
Security Reserve	2%	Bug bounties, audits, emergency recovery
Marketing Fund	3%	Campaigns, education, outreach

8. Platform Services & Business Launch Tools

Launch Your Own Blockchain – Not Just a Token

Soteria Network is more than a cryptocurrency – it's a launchpad for custom blockchains. Our platform empowers businesses to create their own blockchain and native coin with full flexibility and control, far beyond the limitations of ERC-20 tokens.

Through our intuitive web interface, users will be able to configure and deploy their own blockchain with no coding required. This service is designed for non-technical users, startups, and enterprises seeking tailored blockchain infrastructure.

Configurable Features

Our platform will support a wide range of customizable options:

Consensus Algorithms: Choose from X3 to X21, other known algorithms and custom new algorithms supporting Proof-of-Work (PoW), Proof-of-Stake (PoS), and hybrid PoW/PoS models

Masternode Support: Optional integration for enhanced stability and governance

Wallet Options: QT wallets and Electron-based wallets for desktop for different OS and web environments

Blockchain Explorer: Built-in explorer to monitor transactions, blocks, and network activity

Frontend Configuration: All options selectable via our website's no-code interface

Post-Launch Flexibility

Unlike traditional token platforms, Soteria will allow modification of core parameters even after launch – offering adaptability similar to Ethereum, but with greater control and simplicity.

Timeline

This service is expected to launch within 6 months, and will be integrated directly into the Soteria website.

9. Economic Model

As part of our deflationary strategy, 20% of platform profits will be used to buy and burn Soter coins. This mechanism is inspired by Ethereum's EIP-1559 model and is designed to reduce inflation, stabilize value, and reward long-term holders.

10. Security Features

- Anti-relay protection
- Vector67 mitigation
- Timewarp defense
- Double-spend protection for light wallets
- Best practices from leading blockchain security research

11. Sustainability

Soterg is built with a focus on minimizing environmental impact:

- Empirical benchmarking for mining efficiency
- Energy-aware algorithm design
- Support for low-power GPU mining

12. Growth & Development

We are committed to continuous innovation:

- Supporting scalable solutions for businesses
- Enabling wallet builds across OS platforms
- Hosting blockchain explorers and nodes on VPS
- Providing a no-code platform for launching PoW, PoS, or hybrid chains

Scalability

Soteria Network is architected for high throughput and operational efficiency. Its scalability stems from a multifaceted strategy designed to handle large transaction volumes without compromising performance.

Our team is actively enhancing scalability to ensure Soteria can meet future demand. These efforts position Soteria as a leader in responsive and robust blockchain infrastructure.

13. Dividend Model

A percentage of profits from affiliated businesses will be distributed quarterly to supporters, donors, backers, and contributors – reinforcing long-term community engagement and shared success.

14. Platform for Businesses

Soteria will offer a platform where businesses can:

Launch blockchains using PoW, PoS, or hybrid models

Deploy explorers and wallets across OS platforms

Host nodes on VPS

Customize chain parameters without programming

15. Adoption Strategy

To achieve widespread adoption, Soteria Network must lower entry barriers and offer compelling benefits to miners, developers, and traders. By refining and expanding its ecosystem, and forming strategic partnerships, Soteria will strengthen its market presence and establish itself as a leading cryptocurrency.

16. Legal & Risk Disclosures

Whitepaper Status

At present, this whitepaper is a draft of the final version. Numerous planned changes and additional technical details will be integrated in the near future. This draft serves as a starting point and may undergo multiple revisions before it is considered complete.

Legal Disclaimer

This whitepaper is not investment, financial, or trading advice, nor is it a recommendation by Soteria Network. It should not be relied upon for purchasing decisions. It is not a prospectus, financial service offering document, or an offer to sell or buy any security, investment products, or financial instruments in any jurisdiction. \$Soter coins are not structured or sold as securities. No representations or warranties have been made regarding the accuracy or completeness of the information in this whitepaper. This whitepaper does not constitute advice, a sale, or a solicitation of an offer by Soteria Network to purchase our coin, nor is it part of any effort used for investment decision.

Risk Statement

Purchasing \$Soter may involve substantial risk and could lead to a loss of a significant or even the entire amount of money invested. Before purchasing any cryptocurrency, you should carefully assess and consider the risks, including those listed in any associated documentation. Cryptocurrencies should not be purchased for speculative or investment purposes.

For the latest development milestones and release schedule, please refer to the official roadmap at <https://soteria-network.site/roadmap.html>