Liquid Collective

Contents

Executive Summary

BACKGROUND — Liquid staking is a nascent technology with the potential to disrupt traditional staking businesses and open a new design space for advanced financial primitives. There is a need for standardization and an opportunity to build the enterprise-grade liquid staking standard for the entire web3 ecosystem.

PROBLEM — Demand for liquid staking is growing rapidly and institutional interest has emerged. Current decentralized liquid staking protocols are not focused on building a product suitable for security and compliance-conscious enterprises and institutions. At the same time, centralized liquid staking offerings are non-interoperable and increase fragmentation in the market.

SOLUTION — Liquid Collective is a decentralized protocol developed in collaboration with a diverse group of industry leaders to meet the need for an enterprise-grade liquid staking standard that can be widely adopted, increasing liquidity and composability for the web3 economy.

1.

Staking & Liquid Staking

The Growth of Staking

The two leading mechanisms for achieving consensus in decentralized blockchain networks today are proof of work and proof of stake.

Proof of work, used by the Bitcoin network, relies on a decentralized set of network participants to contribute computing power to submit new blocks to the blockchain. Proof of stake is used by nearly all other major blockchain networks today, and relies on network participants ("stakers") to lock-up ("stake") their tokens for the opportunity to submit new blocks to the blockchain and earn network rewards for doing so. Generally, in proof of stake networks, the greater the number of stakers and tokens staked by good actors, the more decentralized and secure a network becomes.

Institutional and retail participants are increasingly looking to participate in staking to earn network rewards. But the biggest blockers for participation in staking are the illiquidity windows and the lock-up of staked tokens, which are mechanisms that primarily exist to preserve network security and integrity.

Liquid staking is an innovation that addresses these needs, providing stakers with increased liquidity and capital efficiency, while preserving the network's security features that accrue to the network as a whole.
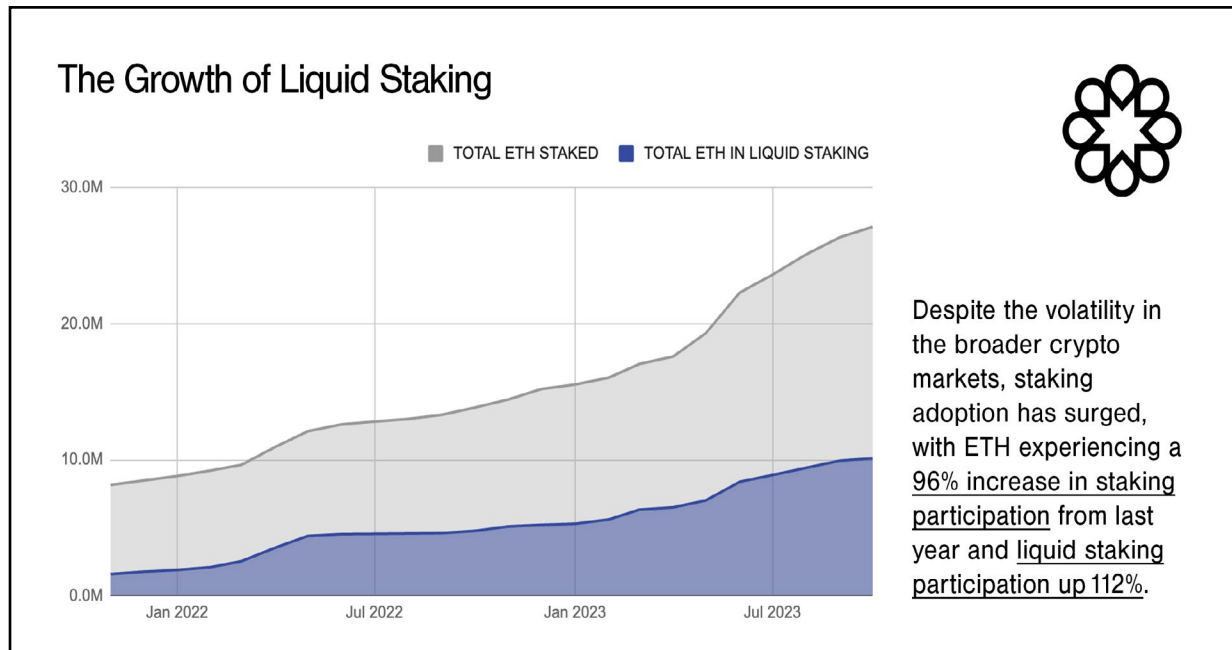
WHAT IS LIQUID STAKING?

Liquid staking is a rapidly growing alternative to locking up a user's tokens when contributing to the security of proof of stake blockchains. Token holders stake their token and receive a receipt token as evidence of their ownership of their staked token. The receipt token can be transferred, stored, traded, and utilized in DeFi or supported dapps.

Whereas traditional methods of staking are subject to bonding and unbonding periods (ranging from days to weeks), liquid staking provides stakers with increased liquidity and capital efficiency.

Liquid Staking

LIQUID STAKING ON ETHEREUM — On Ethereum alone, liquid staking has grown to represent over 39% of staked tokens, with over $44B staked as of June 24, 2024.

The Growth of Liquid Staking

Despite the volatility in the broader crypto markets, staking adoption has surged, with ETH experiencing a 96% increase in staking participation from last year and liquid staking participation up 112%.

SOURCE: DEFILLAMA / DUNE ANALYTICS

"LIQUID STAKING GREW FROM 1 PERCENT TO OVER 40 PERCENT OF THE ETHEREUM STAKING MARKET SEGMENT IN 2022. DEMAND IS GROWING RAPIDLY, AND INSTITUTIONAL INTEREST IS EMERGING. THERE IS A NEED FOR STANDARDIZATION AND, AS A RESULT, AN OPPORTUNITY FOR KRAKEN TO HELP BUILD THE MOST SECURE ENTERPRISE-GRADE LIQUID STAKING STANDARD."

TIM OGILVIE, PRODUCT DIRECTOR, HEAD OF STAKED AT KRAKEN

Liquid Collective

"WITH LIQUID COLLECTIVE, TOKEN HOLDERS GAIN SEAMLESS ACCESS TO ENTERPRISE-GRADE LIQUID STAKING. WE'RE PROUD TO BE COLLABORATING WITH SOME OF THE BEST TEAMS IN WEB3 TO LAUNCH LIQUID COLLECTIVE, ADVANCING OUR MISSION TO COLLECTIVELY BUILD THE MOST TRUSTED AND SECURE LIQUID STAKING STANDARD."

MATT LEISINGER, CPO & CO-FOUNDER OF ALLUVIAL

Overview

OVERVIEW — Liquid Collective is the trusted and secure staking standard: designed to meet the needs of enterprises, built and supported by a broad and dispersed collective of industry leaders.

Liquid Collective is stewarded by an independent industry consortium, with initial members that include The Liquid Foundation, Alluvial, Figment, Coinbase, Staked, Blockdaemon, and other web3 participants.

THE NEED FOR A LIQUID STAKING STANDARD — Traditional methods of staking come with several tradeoffs as stakers must weigh the opportunity cost of locking up their tokens to stake on a given network.

Current decentralized liquid staking offerings do not meet the needs of institutions and enterprises, and lack transparency around validator counterparties. At the same time, centralized liquid staking offerings are non-interoperable and increase fragmentation in the market.

Liquid Collective aims to provide a decentralized approach to enterprise-grade liquid staking, addressing the need for the highest level of security and compliance while promoting standardization and composability.

"TO DEVELOP A SECURITY-FIRST SOLUTION THAT INCREASES LIQUIDITY, COMPOSABILITY AND UTILITY FOR THE ECOSYSTEM, WE NEED TO BUILD A STANDARD AND TO BUILD A STANDARD WE NEED TO BUILD TOGETHER."

MARA SCHMIEDT, CEO & CO-FOUNDER OF ALLUVIAL

Guiding Principles
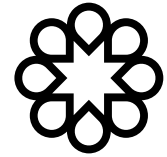
COLLABORATE WITH A POSITIVE SUM MINDSET — Building industry standards requires a collaborative approach. Liquid Collective builds with a positive sum approach to drive collective growth and resilience.

ENABLE PROGRESS THROUGH STANDARDS — Liquid Collective is dedicated to defining professional standards that meet evolving user needs, enable interoperability, and raise the bar for the industry as a whole.

INNOVATE THROUGH DIVERSITY — Liquid Collective believes in the power of collaboration with a diverse group of industry leaders and experts (from DeFi to TradFi) to foster innovation and progress.

EMBRACE TRANSPARENCY — Liquid Collective aims to establish a culture of openness and communication to build and maintain trust within our supported ecosystems.
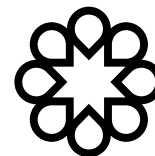
Values

TRUST

SECURITY   TRANSPARENCY

EXCELLENCE   INNOVATION   COLLABORATION
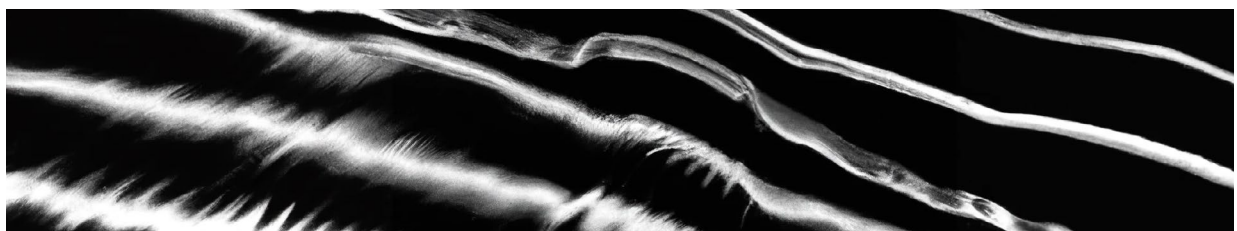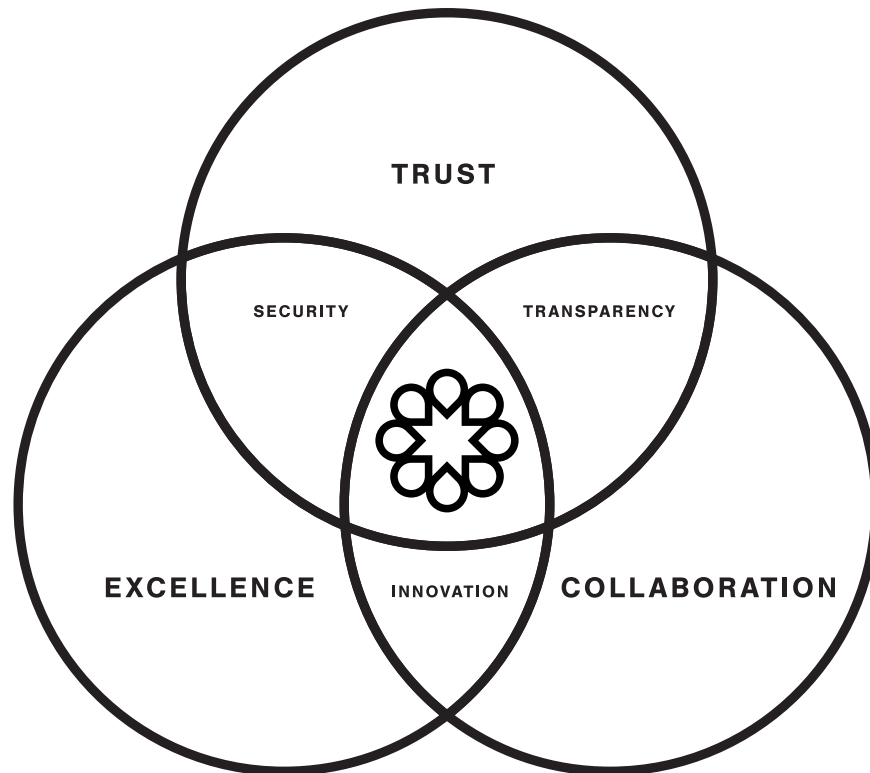
Shared values unite and inspire us.

Roles

PLATFORMS provide a seamless on-ramp and access for users to interact with the Liquid Collective protocol. There are two types of Liquid Collective Platforms: Platforms that support LsETH minting, redemption, and direct Liquid Collective protocol interactions by offering KYC/AML and Sanctions Screening procedures for their users, then submitting users' wallet addresses to Liquid Collective's Allowlist smart contract upon successful completion, and Platforms that do not enable LsETH minting, redeeming, direct Liquid Collective protocol interactions, or KYC/Allowlisting, but do enable secondary protocol interactions such as trading, lending, or other services.

WALLET AND CUSTODY PROVIDERS offer token storage and signing infrastructure. Wallet and Custody Providers enable Platforms to easily access and distribute LsETH to their users through custody and/or embedded minting services. In some cases, these Providers and Platforms are the same entities.

NODE OPERATORS run the validator infrastructure on Liquid Collective, registering validator keys with the protocol, performing validation duties, and earning network rewards for doing so. Liquid Collective does not run validator infrastructure, but instead delegates that critical task to proven Node Operators that meet high performance standards and are required to undergo KYC. Liquid Collective launched with an initial set of enterprise-grade, security-focused Node Operators including Figment, Coinbase, Staked, and Blockdaemon. The staked tokens are distributed across Node Operators in a round-robin manner so that the Liquid Collective protocol is supported by a broad and dispersed active validator set.

SERVICE PROVIDERS provide development, consulting, attestation, legal, or technological services to the Liquid Collective. Liquid Collective seeks to collaborate with existing web3 teams in the development of the protocol's liquid staking offering.

ECOSYSTEM PARTICIPANTS are part of a broad community that includes a range of service providers, and specialists in their respective domains, who collaborate to advance Liquid Collective's enterprise-grade liquid staking standard.

Additional Support
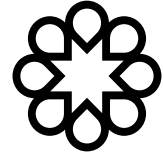
THE LIQUID FOUNDATION is an independent steward of the Liquid Collective protocol designed to support the decentralized growth and long-term sustainability of the protocol and its surrounding ecosystem. The Liquid Foundation is an ownerless foundation with a board of independent directors.

ALLUVIAL is the software development company supporting the development of the Liquid Collective protocol. Alluvial is focused on the overall growth and maturity of the ecosystem by bringing in more institutional participants to participate in proof of stake blockchains. LEARN MORE
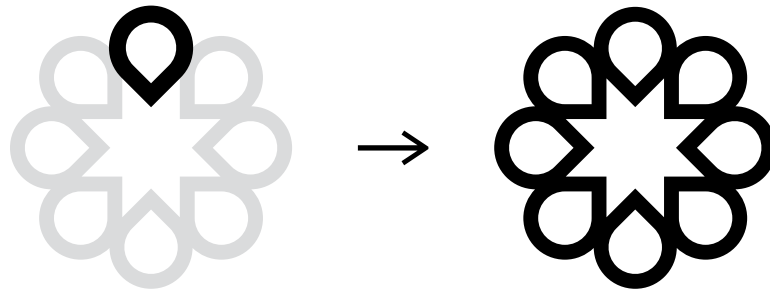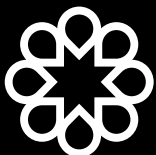

"LIQUID COLLECTIVE'S BRAND SYMBOL IS A GRAPHICAL REPRESENTATION OF 'ONE FROM MANY.' THE STAR IN THE MIDDLE SYMBOLIZES THE FORMATION OF THE LIQUID COLLECTIVE AND OUR INTENDED IMPACT. THE SUM IS GREATER THAN ITS PARTS."
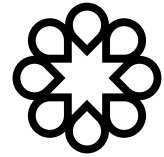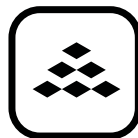
MARK FORSCHER, CMO OF ALLUVIAL

3.

The Protocol

Features

SECURITY & COMPLIANCE — Enterprise-grade infrastructure from Node Operators enables secure staking. Mandatory KYC/AML for users and operators facilitates compliance.

MULTI-PROTOCOL — Collaborating with top teams on other blockchains to provide a native liquid staking solution on each network.

SLASHING COVERAGE — Robust slashing coverage provided through the protocol to every participant. (See Slashing Coverage Program, pg. 28)

FOCUS ON LIQUIDITY — Industry-leading Platforms supporting liquidity

"LIQUIDITY IS A CRITICAL COMPONENT OF A MATURING WEB3 ECONOMY, AND WE ARE EXCITED TO BE A PART OF A GROUP OF INDUSTRY LEADERS TACKLING ONE OF THE MOST RAPIDLY GROWING YET NASCENT SEGMENTS OF THE MARKET TOGETHER: LIQUID STAKING. WE'RE LOOKING FORWARD TO SUPPORTING THE UPCOMING LAUNCH OF THE LIQUID COLLECTIVE PROTOCOL AND TO COLLABORATING ON INDUSTRY-WIDE STANDARDS LIKE LSETH."

SUROJIT CHATTERJEE, FORMER CHIEF PRODUCT OFFICER AT COINBASE

Components

LIQUID COLLECTIVE comprises an ecosystem of Software Components and Service Providers.

SOFTWARE COMPONENTS

The core component of the protocol on Ethereum is a set of smart contracts enabling institutional liquid staking, including:

- ERC20 cToken contract used for LsETH

- Allowlist contract that holds the list of addresses of confirmed users who can perform deposit and withdrawal operations

- Operators Manager contract allowing the Node Operators to manage validator keys

- Oracle contract allowing a quorum of oracle operators to report consensus layer data

Off-chain components helping to operate the protocol

- A CLI that can be used by Node Operators

- A daemon service for Oracle operators

- Various APIs to facilitate access to the protocol to onboard confirmed users, to access various data about the protocol, to monitor and notify agents, etc.

SERVICE PROVIDERS

- Node Operators running the validator infrastructure. Liquid Collective does not run validator infrastructure, but delegates the task to a set of operators

- Oracle Operators reporting data from the consensus layer to the execution layer

- Platforms, including Platforms that conduct KYC review, submit confirmed user addresses, and providing a path to deposit and withdraw

Architecture (Ethereum)
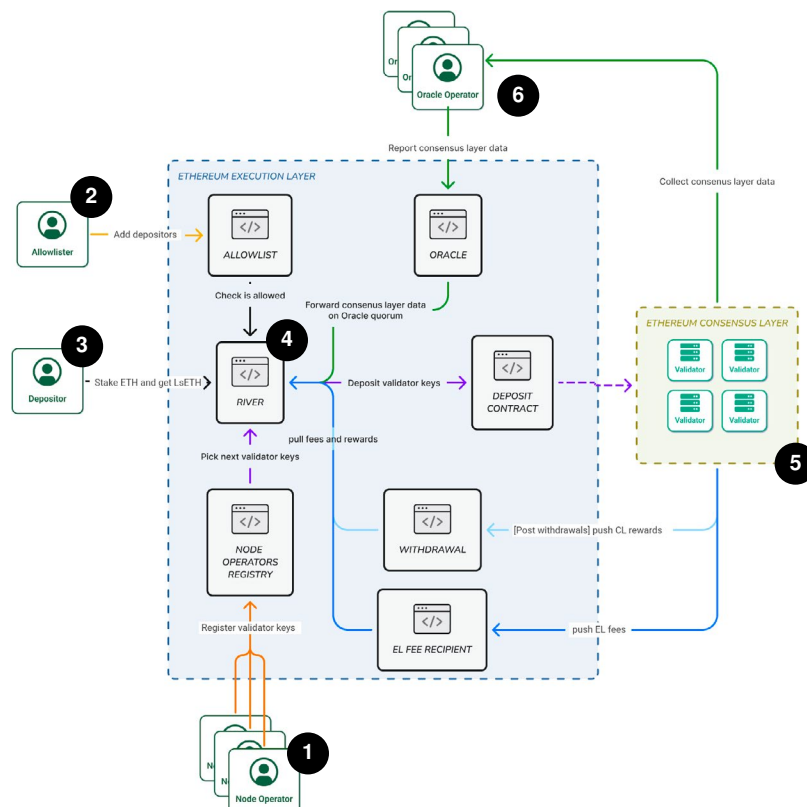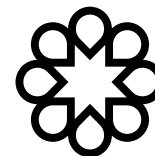
1. Approved Node Operators register validator keys with the protocol

2. Allowlisters, which are approved Platforms supporting LsETH minting and redemption, conduct KYC/AML checks on their users and submit approved user addresses to the protocol's Allowlist

3. Approved user addresses that have been allowlisted may deposit tokens to the Liquid Collective protocol, and receive LsETH in return

4. Liquid Collective protocol programmatically deposits tokens to the Ethereum deposit contract, and assigns approved validator keys to the staked tokens

5. Validators perform validation duties and earn network rewards

6. Oracle Operators report on the balance of underlying staked tokens plus accrued staking rewards minus any slashing penalties, which informs LsETH's conversion rate for deposit and redemption

Comparison

HOW DOES LIQUID COLLECTIVE COMPARE TO LIDO AND OTHER LIQUID STAKING SOLUTIONS?

Other liquid staking solutions have focused on the needs of crypto-native stakers but have not met the requirements of many institutional and enterprise participants. The number of liquid staking protocols solving for staker liquidity has resulted in numerous, relatively illiquid receipt tokens that can only be utilized in certain corners of web3.

Liquid Collective seeks to solve these challenges by developing a protocol that is suitable for institutional stakers and that offers deep liquidity via a unified, standardized solution. Liquid Collective's objective is for this level of liquidity to result in the protocol's receipt tokens (e.g., LsETH) being the most adopted (and thus the most useful) receipt token in web3.

A few areas where the Liquid Collective protocol differs from existing solutions include:

INDUSTRY STANDARDIZATION

- LsTokens create a single user-friendly receipt token standard vs. the "alphabet soup" of receipt tokens that exist in web3 today.

- An open system encourages composability of Liquid Collective's receipt token, unlocking numerous potential use cases.

- Receipt tokens require liquidity to gain mainstream adoption. Liquid Collective aims to become a standard through collaboration with industry leaders and for LsTokens to become the most utilized and adopted token standard in the industry.

- Platform-specific solutions have historically not gained traction relative to industry standards. The stablecoin market is a good example of this.

SECURITY AND COMPLIANCE STANDARDS

- With Liquid Collective's enterprise-grade validator set, network rewards are generated by security-focused infrastructure providers, such as Coinbase, Figment, Staked, and Blockdaemon.

Comparison (cont.)

BUILT FOR ENTERPRISES AND INSTITUTIONAL PARTICIPANTS

- KYC/AML for users and operators facilitates compliance
- API-first solution provides a frictionless onboarding path for Platforms
- cToken design on Ethereum allows customers to control their network reward flow

COLLABORATIVE APPROACH

- Liquid Collective's mission to empower global participation in securing the decentralized internet involves collaborating with industry participants including trading venues, custodians, and node operators to build a liquid staking standard.

"THE LEVEL OF CONFIDENCE FOR STAKEHOLDERS IS STRONGER IN A MULTI-PROVIDER LIQUID STAKING NETWORK. LIQUID COLLECTIVE UNITES THE LEADERS IN PROTOCOL STAKING TO DELIVER THE HIGHEST QUALITY SOLUTION THAT REPRESENTS THE BEST INTERESTS OF THE COMMUNITY."
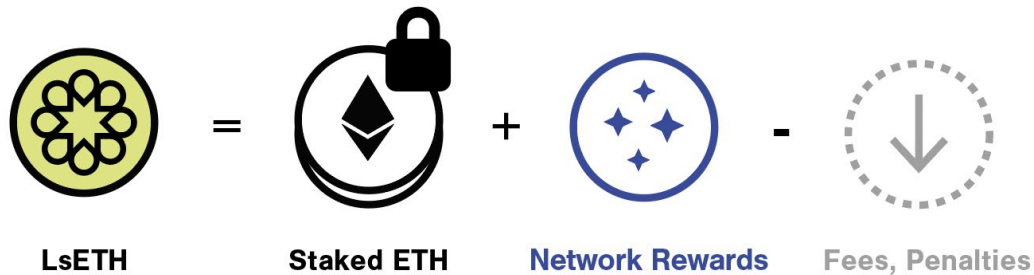
LORIEN GABEL, CO-FOUNDER & CEO, FIGMENT

4.

Token Model
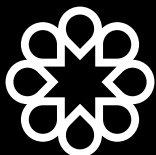
Liquid Staked ETH (LsETH) is the receipt token programmatically generated when users stake ETH through the Liquid Collective protocol.

LsETH

LsETH = **Staked ETH** + **Network Rewards** - **Fees, Penalties**

LSETH a fungible receipt token based on the Ethereum ERC-20 cToken model. When a user deposits ETH to the Liquid Collective protocol, they receive an equivalent amount of LsETH that evidences their legal and beneficial ownership of the staked ETH, as well as any network rewards that accrue to the staked ETH minus protocol service fees and network slashing penalties, if any.

LsETH implements the cToken model, which uses a floating conversion rate–a.k.a. the protocol conversion rate–between a receipt token and the staked tokens to reflect the value of accrued network rewards, penalties, and fees associated with the staked tokens. The conversion rate is the amount of ETH for which LsETH can be converted. The conversion rate is independent of the price at which ETH or LsETH may trade on the open market.

At least once every 24 hours, an oracle network reports the new balance of staked ETH from accrued network rewards or fees. The conversion rate is computed as the total balance of staked ETH over the total supply of LsETH. If accrued network rewards are greater than penalties and fees, the protocol conversion rate would increase to reflect the net network rewards collected by the protocol. Because of the cToken design, LsETH's conversion rate may fluctuate.

User Example

CONVERSION RATE — In contrast to token models, such as aTokens, that issue new net network reward tokens on a unit basis, depositors on the Liquid Collective protocol will not receive more or less tokens as they receive rewards or penalties. Instead, the conversion rate for each unit of LsETH owned by the depositor will increase or decrease (i.e., the LsETH will evidence legal and beneficial ownership of more or less ETH) in an amount that reflects accrued network rewards.

USER EXAMPLE — If you deposit 100 ETH to the Liquid Collective protocol, when the protocol conversion rate is 1, you will receive 100 LsETH in return (ETH amount / conversion rate = 100/1).

After some time, you decide it's time to withdraw your ETH from the protocol. Your staked ETH has accrued 20 ETH in network rewards. The conversion rate is now 1.2.

Your 100 LsETH is now equal to 120 ETH (100 * 1.2). You receive your 120 ETH when converting your 100 LsETH tokens.

LsETH FAQ
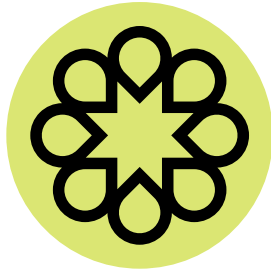
WHAT CAN YOU DO WITH LSETH?

- Hold LsETH and accrue Ethereum network rewards
- Exchange LsETH for another token
- Use LsETH as collateral to participate in a wide range of DeFi activities

WHERE IS STAKED ETH CUSTODIED? Liquid Collective is non-custodial. Ethereum deposited to Liquid Collective is custodied by the Ethereum deposit contract.

HOW DO THE CTOKEN AND ATOKEN MODELS COMPARE? The Liquid Collective protocol uses a cToken model for LsETH. The cToken evidences ownership of a staked token plus any accrued staking rewards, and less any slashing penalties and fees. The conversion rate between the receipt token and the corresponding tokens continues to reflect the staked tokens + staking rewards - penalties and fees. This conversion rate is computed as the total balance of staked ETH over the total supply of LsETH. The aToken model, however, continuously updates the supply of a representative token to track the underlying token 1:1. The aToken model can also be referred to as a rebase token model.

Unlike aTokens, cTokens are Ethereum ERC-20 compliant and are more widely adopted (and thus more useful) than other forms of receipt tokens in DeFi today. The composability of cTokens, and their wider adoption, were factors in the selection of the cToken model for the design of Liquid Collective's LsTokens.

5.

The Risks
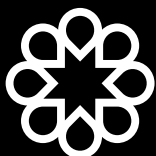
Liquid staking protocols, such as Liquid Collective, help
to provide the same staking service familiar to proof
of stake networks, while also providing stakers with a
receipt token that evidences ownership of their staked
tokens to improve liquidity and composability. Liquid
Collective is not a DeFi yield strategy.

The Risks

1. **SMART CONTRACT RISK** — The Liquid Collective protocol is a layer of code written on top of the Ethereum deposit contract. Similar to any protocol providing a service, there is a potential for code vulnerabilities that are missed by third-party auditors.

   LIQUID COLLECTIVE'S MITIGATION STRATEGY — Compared to a typical DeFi lending protocol, where all tokens are held in a layer of smart contracts that have the potential for code vulnerabilities, the Liquid Collective smart contracts only hold tokens as they flow through to Ethereum's core ETH deposit contract.

   Multiple third-party service providers have been engaged to conduct audits of Liquid Collective's code. In addition to conducting third party audits, Liquid Collective's strategy to deliver multi-chain liquid staking involves collaborating with existing liquid staking Technology Providers and leveraging their already battle-tested code.

2. **SLASHING RISK** — As is the case in all proof of stake networks, validators may be penalized for failing to perform their job efficiently. This most commonly results from validator downtime and from a double signing event.

   LIQUID COLLECTIVE'S MITIGATION STRATEGY — Part of Liquid Collective's strategy to provide a secure and enterprise-grade liquid staking solution involves conducting sanctions checks on the protocol's active validator set. Liquid Collective leverages the support of security-focused validators that institute best practices.

   Although the protocol's validator set consists of prominent Node Operators, in the event that a slashing event occurs the protocol provides an industry-leading Slashing Coverage Program to all participants, covering both network-wide events—such as network outages—and node operator failures. The program's three tiers of coverage include a Node Operators commitment which requires that Node Operators supporting the protocol's active set collectively provide up to 0.30% of the protocol's AoP in coverage, up to a maximum of $5.0 million per Node Operator, for deductibles against slashing incidents and missed rewards incurred due to the fault of their infrastructure.

The Risks (cont.)

3.   **LIMITED VALIDATOR SET** — There is a risk that a Node Operator could surpass a certain threshold of tokens staked and be incentivized to act maliciously by censoring transactions on a given network.

   LIQUID COLLECTIVE'S MITIGATION STRATEGY — Liquid Collective intends to work with third party validator rating providers to establish validator standards and increase the active set of validators. The staked assets are distributed across Node Operators in a round-robin manner so that the Liquid Collective protocol is supported by a broad and dispersed active validator set.

   In addition, Liquid Collective aims to reduce the risks associated with a limited validator set for the entire web3 ecosystem by providing an enterprise-grade liquid staking standard. Offering a decentralized framework to participate in liquid staking across many proven Node Operators, while also meeting institutional requirements, unlocks an alternative to staking assets via one centralized entity alone, thus increasing the diversity of token distribution across validators in the staking ecosystem as a whole.

4.   **RISK OF HACK** — A significant risk would be a hack where the minting functionality for LsETH is compromised.

   LIQUID COLLECTIVE'S MITIGATION STRATEGY — Protocol activity, such as LsETH supply updates, will be monitored and analyzed. In the case of any anomalies a first incident response plan will be executed to remedy the issue, which may result in pausing the protocol to temporarily disable all types of activities.

"OUR ALIGNMENT WITH ALLUVIAL ON SECURITY FOCUS IS SELF-EVIDENT. FROM DAY ONE, ALLUVIAL EMPHASIZED THE NECESSITY OF SECURITY TO BUILD AN ENTERPRISE-GRADE LIQUID STAKING PROTOCOL. FROM HOW THE VALIDATORS HAVE REDUNDANT SECURITY COMPLIANCE MEASURES, TO THE RIGOROUS SMART CONTRACT TESTING THE ALLUVIAL AND KILN TEAMS CONDUCT, WE WERE IMPRESSED WITH THE PROFESSIONALISM OF NOT JUST ALLUVIAL BUT OF THE ENTIRE COLLECTIVE."

**SPENCER MACDONALD, CO-FOUNDER, SPEARBIT**

Risks FAQ

HOW IS THE LIQUID COLLECTIVE PROTOCOL SECURED? The Liquid Collective protocol implements a number of best practices:

- Best-in-class node operators providing enterprise-grade staking infrastructure
- Non-custodial staking framework reduces counterparty risk
- Multiple code audits and partnering with battle-tested technology providers
- DAO governance and decision making process alongside industry leaders

IS THE LIQUID COLLECTIVE PROTOCOL AUDITED? Yes. View the [results](#) of the protocol and feature audits to date.

6.

Slashing Coverage Program
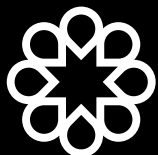
With the rise of institutional participation in staking, slashing coverage is a risk mitigation consideration for enterprises and institutions. Liquid Collective's Slashing Coverage Program provides web3-native slashing coverage to every participant staking through the Liquid Collective protocol. The program covers both network-wide events—such as network outages—and node operator failures.

Slashing Coverage Overview
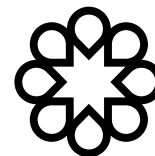
1. **NEXUS MUTUAL COVERAGE** — Nexus Mutual is the leading provider of decentralized crypto-native protection, having secured billions of dollars in value held in smart contracts. Nexus Mutual's bespoke Slashing Coverage for Liquid Collective is exclusion-free umbrella coverage that provides access to Nexus Mutual's slashing coverage directly from a user's custody account at platforms such as Coinbase or Bitcoin Suisse.

2. **SLASHING COVERAGE TREASURY** — Liquid Collective's Slashing Coverage Treasury allocates a percentage of all network rewards to provide coverage for slashing coverage deductibles on network-wide slashing incidents. The Treasury continues to accrue network rewards unless deployed.

3. **NODE OPERATOR COMMITMENT** — Node Operators supporting Liquid Collective's active set provide coverage for deductibles, up to a cap, against slashing incidents and missed rewards incurred due to the fault of their infrastructure.

How It Works
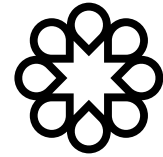
SLASHING INCIDENTS may result from a node operator's specific fault/inaction as well as from network-wide events broadly (e.g., client bug, natural disaster).

Liquid Collective's Slashing Coverage Program is designed to mitigate the impact of both types of incidents. Nexus Mutual provides umbrella coverage up to $5,000,000 annually, and the deductible is assigned between the Node Operator Commitment and the Slashing Coverage Treasury, depending on the cause of the incident.

NETWORK-WIDE EVENTS ARE COVERED	NODE OPERATOR EVENTS ARE COVERED
1. Nexus Mutual Coverage (deductibles paid by Slashing Coverage Treasury)	1. Nexus Mutual Coverage (deductibles paid by Node Operator Commitment)
2. Slashing Coverage Treasury	2. Node Operator Commitment
N/A	3. Slashing Coverage Treasury

LSETH USERS MAY STILL BE SUBJECT TO SLASHING LOSSES. IF SLASHING LOSSES WERE TO OCCUR, THEY WOULD BE SOCIALIZED PRO RATA FOR ALL LSETH USER'S STARTING WITH EARNED BUT UNREDEEMED NETWORK REWARDS.
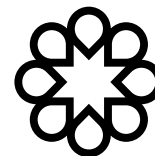
Nexus Mutual Coverage

NEXUS MUTUAL collaborated closely with representatives from the Liquid Collective to provide third-party, decentralized slashing coverage for the Liquid Collective protocol.

- The Nexus Mutual coverage for Liquid Collective provides umbrella coverage up to $5,000,000 in slashing losses in excess of coverage deductibles.

- Nexus Mutual coverage details as well as definitions around the exclusion-free policy can be found in Nexus Mutual's Slashing Coverage.

SECURE BY DESIGN. TRANSPARENT BY NATURE — Nexus Mutual is fully transparent. Everything is on-chain, which means all information can be accessed and audited at any time. Anyone can review the active coverage, capitalization levels, and other data and analytics in Nexus Tracker.

COLLABORATIVELY DEFINED — Experts from the Liquid Collective and Nexus Mutual worked together to create this comprehensive coverage. Liquid Collective worked with leadership at Nexus Mutual to design a bespoke slashing coverage. By collaborating together, we were able to produce dynamic coverage that scales with the Liquid Collective's needs and provides the flexibility needed for the protocol's active set to continue to expand over time.

Slashing Coverage Treasury & Node Operator Commitment

SLASHING COVERAGE TREASURY — A percentage of total network rewards generated is allocated to Liquid Collective's Slashing Coverage Treasury.

- Liquid Collective's Slashing Coverage Treasury collects a fixed 0.30% of network rewards and continues to accrue network rewards unless deployed. This model ensures that coverage dynamically scales with the growth of Liquid Collective's AoP.

- The Slashing Coverage Treasury is utilized to cover Nexus Mutual coverage deductibles on network-wide slashing events and may provide additional coverage on slashing incidents in excess of Nexus Mutual coverage maximums or non-covered events.

NODE OPERATOR COMMITMENT — Liquid Collective requires that Node Operators supporting the protocol's active set collectively provide up to 0.30% of the protocol's AoP in coverage, up to a maximum of $5.0 million per node operator.

- Node Operator commitments are utilized to cover Nexus Mutual coverage deductibles on slashing incidents caused by a Node Operator's infrastructure or setup.

- Node Operator commitments are computed as (Liquid Collective AoP x 0.30% x Node Operator's pro-rata share of funded validators) with a maximum of $5.0 million per Node Operator.

- Node Operator commitments will continue to be recalculated as Liquid Collective increases AoP.

7.

Appendix
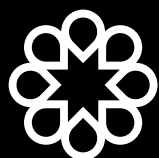
Key Concepts
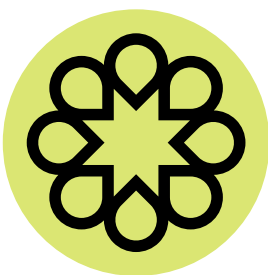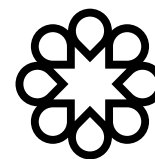
DEPOSIT — The act of staking ETH through the Liquid Collective protocol and receiving Liquid Staked ETH (LsETH) in return.

REDEEM — The act of withdrawing LsETH through the Liquid Collective protocol to receive ETH.

LSETH — Liquid Staked ETH is the receipt token programmatically generated when users stake ETH through the Liquid Collective protocol. LsETH is a fungible receipt token based on the Ethereum ERC-20 cToken model.

PROTOCOL CONVERSION RATE — The amount of ETH for which LsETH can be converted. This is a dynamic rate that is inclusive of a) ETH staked through the Liquid Collective protocol, b) network rewards accrued, and c) protocol fees and penalties deducted, if any.

NETWORK REWARDS — Rewards generated by the network and earned by Ethereum validators for effectively participating in the validation of transactions and contributing to the security of the Ethereum network.

EXECUTION LAYER FEES (PRIORITY FEE AND MEV NETWORK REWARDS) — Fees received by validators for the execution of transactions. Those fees are distributed on the execution layer directly. The Liquid Collective protocol automatically stakes the execution layer fees to increase the protocol's overall reward rate.

TOTAL LSETH SUPPLY — Amount minted by the protocol for staked ETH, minus the total amount redeemed.

Additional FAQ
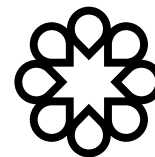
WHAT IS LIQUID COLLECTIVE'S STRATEGY FOR DEFI INTEGRATIONS? Liquid Collective's strategy is to create the industry standard for liquid staking. Over the medium- to long-term Liquid Collective expects LsTokens to be adopted in every corner of DeFi and web3.

**DOES LIQUID COLLECTIVE INTEND TO OFFER A GOVERNANCE TOKEN?** Liquid Collective expects to issue a token to enable a broad and dispersed community of industry participants to govern its protocol.

WHAT IS THE PROTOCOL SERVICE FEE? The Liquid Collective protocol charges a service fee set at 10.0% of network rewards. Liquid Collective's service fee is split amongst Node Operators, Platforms, Custody & Wallet Providers, Service Providers, the protocol's Slashing Coverage Treasury, and the Liquid Collective DAO, which comprises a broad and dispersed community of protocol participants. All service fees are distributed in LsTokens, which are the native receipt tokens of the protocol (e.g. LsETH).

WILL NODE OPERATORS BE ABLE TO RUN MEV BOOST? MEV Boost may be able to provide stakers with access to greater network rewards without compromising Liquid Collective's extended values of trust and transparency, because MEV is distributed in a secure, fair, and transparent manner. Liquid Collective will require that Node Operators supporting the protocol's active validator set run MEV Boost middleware, provided that it is commercially reasonable and secure to do so. The Liquid Collective protocol automatically stakes execution layer fees, including MEV, to increase the protocol's overall reward rate.

DOES LIQUID COLLECTIVE UTILIZE MULTISIG? An administrative multisig is made up of a variety of Liquid Collective ecosystem participants. Over time, governance decisions will be executed through an increasingly programmable, smart contract-based execution system.

Please Note
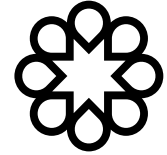
Liquid staking via the Liquid Collective protocol and using LsETH involves significant risks. You should not enter into any transactions or otherwise engage with the protocol or LsETH unless you have fully understood all such risks and have independently determined that such transactions are and/or engagement is appropriate for you.

Any discussion of the risks contained herein should not be considered to be a disclosure of all risks or a complete discussion of the risks that are mentioned. The material contained herein is not and should not be construed as financial, legal, regulatory, tax, or accounting advice.

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