# **Liqee Protocol**

#### Vision of the Network

Lending protocol for Liquid Staking Assets

#### Overview

Lique is the first liquid staking assets lending market powered by dForce's lending protocol. It also provides tokenization for PoS and mining facilities and provide PoS staking services across a number of networks.

We strive to become the largest lending protocol for liquid staking tokens and a unified portal for liquid staking markets.

#### **Protocol Verticals**

Lique Protocol has three main verticals:

Verticals	Description
Lending Market	A lending market powered by dForce Lending protocol's smart contract covering Liquid Staking Assets (LSA), such as PoS staking tokens, DeFi staking tokens, and mining assets certificates. Borrowers can deposit these tokens as collaterals to borrow the underlying tokens or stablecoins like USX.
Tokenized Staking Assets (tAssets)	Tokenized representations of bonded PoS assets, staking assets and mining assets. First two of such tAssets to launch on Lique are tFil and tXTZ. tFil is a Filecoin token certificate backed by actual filecoin pledged for mining and associated mining equipments, and tXTZ is token certificate representing collateralized XTZ deposit (Tezos network token) by Tezos validators. tToken are supported as collaterals in our lending market.
Liqee Staking Service	Lique is also actively participating in securing PoS networks by providing validation services, for networks, such as Atom, Tezos, and more, and it's looking to expand to other PoS networks. Token holders can delegate their tokens to Lique validators for great fee trade off.

# Protocol Participants and Run-through of how they come together:

There are 4 main types of participants in Lique's ecosystem: **depositors** (lenders), **borrowers**, **asset issuers** (who issue tokens such as tFIL, tXTZ etc.), and **PoS and Staking token delegates** (who delegate their tokens to Lique for validation services).

First, here's an overview of how these participants interact within Lique

In the Lending Market, depositors lend underlying tokens (such as ETH, DOT, ATOM, FIL, and XTZ) to Lique's lending market, which is borrowed out by borrowers through liquid staking tokens (such as rETH, rDOT, rATOM, tFIL, and tXTZ) collateralized loans. Interest paid by borrowers are distributed to depositors of underlying tokens. The interest rate of the loan is determined by the interest rate curve and liquidity utilization in the market. Depositors can also supply liquid staking token (such as rToken or tToken) into lending market to borrow out underlying tokens or stablecoin like USX to optimize and

enhance their staking yield. For example, based on LTV of 70% and borrowing interest rate of 3%, in theory, you are able to enhance your before-fee ATOM staking yield from 9% to over 23% or (or DOT from 14% to 39%) by recursive leverage (3.3x max, without risk of margin call).

The lending market will facilitate multi-direction lending and borrowing, mainly with the following combinations:

- 1. Lend rToken/tToken and borrow underlying tokens, i.e supply rETH and/or rATOM to borrow ETH and/or ATOM.
- 2. Lend underlying tokens to borrow other underlying tokens, i.e supply DOT to borrow FIL/ETH/XTZ/ATOM etc
- 3. Lend combination of rToken and underlying tokens to borrow underlying tokens, i.e to supply rATOM and ETH, to borrower DOT/ATOM etc
- 4. Lend tokens and borrow/mint USX, then deposit into dForce's lending market to borrow other crypto assets

This is a highly efficient and flexible lending market, which facilitate a variety of combination for lending and borrowing transactions. Lique Protocol distributes Lique Tokens as incentives for lenders as well as borrowers.

On **Tokenization**, Lique provides a one-stop-service for tokenizing PoS or mining assets, i.e. issuing tFIL (Filecoin mining asset certificate) backed by pledged FIL tokens on chain and its associate mining equipments; or tXTZ (Tezos validator's staking deposit certificate), which is asset certificate backed by XTZ security deposit owned by the node operator. One token certificate represents the value of one underlying token and they are supported as collaterals in Lique's lending market. Node operators/miners will be able to increase their capital efficiency as they can now utilize their otherwise illiquid assets.

*On Staking*, Lique provides staking service for networks like Cosmos and will look the further expand into other networks; the staking service will offer very attractive fee structure for validation.

For deeper understanding, here are definitions of each protocol participants

# **Depositor** (Lender)

A Depositor is a user that lends liquid staking token (as collateral), underlying PoS token or stablecoins (i.e USX) to the Lique lending market. Deposited tokens are pooled and lent out to borrowers, with accrued interest pro-rata distributed to all depositors.

Depositors receive newly minted qToken in exchange for their deposit. qToken tokens represent a depositor's share in the supply pool and can later be redeemed to claim the initial deposit, along with accrued interest.

### Borrower

Borrower is a user that could deposit supported tokens as collateral to borrow other tokens (i.e underlying PoS tokens) from the Lique lending market. Tokens supported by Lique can be deposited and locked to create a loan position. Positions are required to maintain a loan-to-value (LTV) ratio below the set maximum.

By borrowing, users can gain access to liquidity without losing price exposure to their originally held collateral assets. Liquid staking token holders are free from un-bonding periods as they gain instant liquidity by borrowing underlying tokens by supplying liquid staking tokens as collaterals. Borrowers should closely watch the LTV ratio, as loans with LTV ratios over the set maximum are subject to liquidation.

## **Tokenized Asset Issuer & PoS Token Delegates**

Tokenized asset issuers are those who intend to issue tokenized assets on our platform and staking delegate

are the PoS token holders who would like to delegate their tokens to Lique for validation services.

# Liqee Token (LQE)

The Lique Token (LQE) is Lique Protocol's governance token.

Development of Lique Protocol is driven by the Lique community through gradual decentralized governance progresses (DAO).

Governance over Lique is managed by stakers of Lique Tokens (LQE). In the absence of Token Generation Event (TGE), the core team acts as representative for participating in the governance.

LQE is designed to capture Lique's interest spread (in form of interest reserve) income from lending market, allowing its value to scale linearly with outstanding loans in the lending market; it also captures the tokenization fee for assets tokenized on its platform and capture part of the staking fee for providing validation services for its delegates or network partners. All the fees above are collectively referred to as protocol fees.

There are multiple utilities of LQE token. Lique could 1) use protocol fees to burn LQE in open market; or 2) use protocol fees to buy back LQE in the market, then distribute to LQE stakers pro-rata to their stake, benefitting stakers as adoption of Lique increases -- stakers of LQE are incentivized to participate in the governance and to further advance and promote the protocol.

LQE is also used as incentive to bootstrap supply/borrow, tokenization and staking AUM. The protocol distributes LQE tokens to various network participants.

## **Liquidity Mining**

LQE rewards can also be earned by participate in lending market, tokenization, or staking service on Lique's network.

# **LOE Value Flow**

LQE tokens generate a buying pressure that increases proportionally with Lique's outstanding loans/tokenized assets/staking AUM. Protocol fees are used to purchase LQE tokens in the markets, which are burned or distributed as staking rewards to LQE stakers.

#### **Protocol Fees**

LQE captures protocol fees generated from Lique's protocols, where it will be used for value accrual of LQE tokens. Lique's protocol fees are sourced from Lending Market, Tokenization and Staking Services.

## Lending Market Interest Reserve

The interest reserve ratio is used to capture portion of the interest spread between supply rate and borrow rate. The reserve will be built up along with growing of the outstanding loans. The interest reserve will be first unitized to provide buffer for bad debt allowance (if any) and the remaining are pooled into protocol fees for further distribution.

# **Tokenization**

Lique will also tokenize other staking or mining assets (i.e Filecoin mining). A flat fee (upfront or exit fee) will be charged for tokenizing an asset, and the tokenization fee will be pooled into the protocol fee for further distribution.

## **PoS Staking Services**

Lique also intends to run a number of PoS validation services for participating in the partner network, there may be fee charges for providing such services; which will then be pooled periodically into protocol fees for further distribution.

# **Liqee Token Supply and Distribution**

There will be a total of 1,000,000,000 LQE tokens to be distributed over a period of 4-6 years.

There is no Token Generation Event yet, detailed token distribution is to be disclosed in due time.