Liquid Staking for Filecoin – FVM SpaceWarp

The aim is to create [Filecoin Liquid Staking Wrapper](#)

In Filecoin each Storage provider (SP) receives storage fees paid regularly by clients in exchange for storing data .

Block rewards are large sums that are given to the storage provider credited for a new block. Unlike storage fees, these rewards do not come from an associated client; rather, the network "prints" new FIL as both an inflationary measure and an incentive to providers.

All active storage providers on the network have a chance at receiving a block reward, their chance at such being directly proportional to the amount of storage space currently being contributed to the network.

So basically each SP can earn more storage fees proportionally to the amount of storage he provides . And each SP needs to put upfront collateral in case he fails to

Store users data correctly, so SP would be slashed :

Filecoin includes three different collateral mechanisms:

- Initial pledge collateral (initial commitment)
- Block reward as collateral (vesting block rewards over time)
- Storage deal provider collateral (aligns incentives between storage provider and client)

Slashing is a set of penalties that are to be paid by storage providers if they fail to provide sector reliability or decide to voluntarily exit the network.

When storage providers agree to store data for a client, they're required to put down collateral. If they fail a Proof of Spacetime at any point during the contract, they'll be penalized with one of several slashing penalties, including:

- Fault fees (offline faulted sector)
- Sector penalties (undeclared faulted sector)
- Termination fees (terminated or removed sector)

Slashing is a key part of the incentivization that encourages good behavior amongst all the players in the Filecoin network.

SP provides storage. SP often can offer higher amount of storage but lacks appropriate amount of Fil tokens that he needs to put upas collateral.

SP receives block reward in case he wins the epoch (proposes the block on filecoin blockchain)

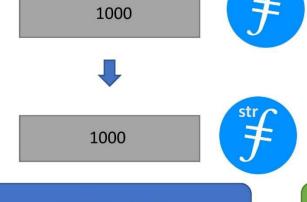So we need to create simple landing page : please don't mind the name, style,colors etc 😊))

StreamStake

MINTING FILECOIN LIQUID STAKING DERIVATE

strFIL

strFIL balance in this wallet:

1000

1000

strFIL balance in this wallet:	**MINT strFIL**	strFIL balance in this wallet:

1500

6500

Then on the smart contract mints a liquid asset pegged to the staked asset in a 1:1 ratio. The original token is staked and generates yield, and the new liquid pegged asset is made available for use in DeFi

WE NEED TO USE MINTER INTERFACE:

```
interface Minter {
function mint(address to, uint256 amount, uint decimalsOfInput) external;
}
```

AS ALL FILECOIN ECOSYSTEM IS BASED ON COMPETITIVE RATES IN BETWEEN THE USERS AND SPs , WE NEED TO ALLOW THEN THE strFIL PROVIDERS TO SET THEIR OWN DEAL WITH SP PROVIDERS THAT WILL BORROE FIL FROM str PROVIDERS

So basically