

Polkastarter Staking + Incentive + (on-chain) Lottery Concept v1.0

Problem / Intention	Approach	Solution / Outcome
POLS token needs more usage (to support price)	* Incentivize POLS holder to stake (as much as possible and as long as possible)	* reward staking with (token) credits depending on $\text{staked_amount} * \text{time}$
Do not force users to stake POLS longer than they want	* Do not time-lock staked POLS, instead incentivize longer staking	* reward staking with (token) credits depending on $\text{staked_amount} * \text{time}$
There might be a legal problem to reward users with POLS for staking POLS (tbd ?)	* Create a new token (*) which is actually a IOU for a lottery ticket	* Create POLSX token * only with POLSX token (credits) users can buy tickets to participate in the lottery
By default a token is tradeable. (Is this a problem ?)	* We (may) want to make POLSX non tradeable	* Create a POLSX token which is “pause-able” and “burn-able” by deployer / admin
Allocate lottery tickets according to amount and time POLS has been staked	* Users can redeem POLSX for a lottery tickets when applying for lottery based token sale.	* $\text{lottery_tickets_amount} = \text{POLSX credit} + \text{POLSX amount}$ ($\text{POLSX credit} = \text{staked POLS amount} * \text{time}$)
Every participant should have a fair chance to win, corresponding to his commitment* to the Polkastarter ecosystem (* = staked POLS amount * time)	* Users with a low POLS amount can get a ticket if they stake longer. * The more and longer POLS is staked, the more ticket will be allocated. * Every ticket has the same probability to win.	* Users with a small amount have possibility to get a lottery ticket * Users with a lot of POLS can will get more tickets and a higher chance to win
Users holding a large POLS amount shall be des-incentivized to split their holdings into multiple wallets	* The lottery is ticket based (not account based) * Every ticket has an equal chance to win. * Users can have multiple winning tickets. * The amount of project-token which can be purchased (only) depends on the number of winner tickets	* There is no difference in the probability to win as well as the amount of project tokens to be allowed to purchase for i.e. 1 wallet with 10 tickets ... vers 10 wallets with 1 ticket each
Users who did win in the lottery shall have a lower chance to win the next time.	* When users with winning tickets purchase project token, their corresponding amount of POLSX will be burned	With less POLSX after winning and purchasing project token, users have a lower chance to win next time and ... User have to stake more POLS and/or longer to earn POLSX again

(*) Actually there is no need to create a real POLSX token tracking the staking credit to claim lottery tickets, but implementing it as a “real token”, would allow to make it tradeable with just switching it on within the contract.