elSOL: Solana Incentivized Liquid Staking Token

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NFA / DYOR

Abstract. elSOL is an incentivized Liquid Staking Token (LST) on the Solana blockchain, designed to allow users to earn staking rewards without locking their assets or managing complex operations. By holding elSOL, users contribute to the security of the Solana network while maintaining liquidity and receiving rewards. This approach further strengthens the decentralization and security of the entire network.

elSOL addresses the challenges previously associated with Solana staking, aiming to foster long-term prosperity and a sustainable ecosystem on the Solana blockchain. Built on the foundation of the Solana Foundation's official staking pool program, which has undergone more than ten audits to ensure its security, elSOL integrates open-source software development with automated validator management services to deliver a comprehensive solution. This contributes significantly to the creation of a sustainable Solana ecosystem.

Moreover, elSOL incorporates holding incentives. The solv development team, which operates elSOL, has established the Validators DAO, making elSOL holders eligible for TGE airdrops and long-term vesting airdrops of the DAO's VLD tokens. By staking VLD tokens, holders can obtain veVLD voting rights, which enable them to participate in the decentralization of elSOL's delegation strategy.

elSOL promotes the enhancement of security and decentralization of the Solana network, providing an environment where more users can enjoy the benefits of staking. As a result, it aims to support the healthy growth of the entire Solana ecosystem, contributing to long-term prosperity and sustainable innovation.

1. What is Staking?

Staking SOL tokens strengthens the security of the Solana blockchain network while rewarding participants for their contributions. Staking involves delegating tokens to a validator who processes transactions and maintains the network. Each validator verifies transactions and casts votes, with the weight of their votes being proportional to the amount of tokens delegated through staking.

Staking is a crucial way to demonstrate trust in a validator. Validators with more staked tokens are considered more reliable, as they tend to operate more consistently and earn higher ratings from users. As more tokens are staked with a validator, their voting power increases, giving them greater influence within the network. Validators earn block rewards as compensation for their efforts in verification and voting, and

the more tokens staked with them, the more opportunities they have to vote, which in turn increases their rewards.

However, if a validator engages in dishonest activities or attempts to gain unjust profits, a mechanism known as "slashing" is triggered. This results in the confiscation of the staked tokens and the validator's earnings, posing a significant risk. Additionally, staking with an inactive validator carries the risk of not earning any rewards. Therefore, users must carefully select a trustworthy validator when staking. Choosing a reliable validator enhances network security, and in return, users receive staking rewards.

In essence, staking is central to the Proof of Stake (PoS) system, playing a vital role in maintaining the health and security of the network. PoS is designed to provide incentives to token holders while maintaining network security, encouraging more people to contribute to network stability. This ensures the safe operation of the entire blockchain network.

Reference (Solana Documentation - Staking on Solana): https://solana.com/docs/economics/staking

2. Why elSOL?

Staking is essential for maintaining a secure blockchain network and has increasingly attracted the interest of investors due to its profitability. However, several challenges persist in the current system.

2.1.1 Challenges for Individuals

- **Uncertainty of Rewards and Management Costs:** Staking rewards are not guaranteed unless the validator you stake with produces blocks. Even if an APY (Annual Percentage Yield) is displayed, there is a possibility that no rewards will be earned. Therefore, investors must constantly monitor the validator's status, which can be burdensome. To mitigate this risk, some investors consider spreading their stakes across multiple validators, but this further increases management costs.

- **Locked-In Staked Assets:** Staked assets are locked for a certain period and cannot be withdrawn immediately. Additionally, even after initiating unstake, it can take up to two days for assets to return to your possession. This makes it challenging to respond to sudden liquidity needs.

2.1.2 Challenges for Validators

- **Demanding Operations and High Skill Requirements:** Running a validator is a 24/7 operation requiring constant monitoring and immediate responses to unexpected errors and emergency

updates. In addition to technical skills, validators must have a deep understanding of economics and blockchain, as well as marketing capabilities. Validators need to promote their work and contributions to the chain to attract staking, which requires a broad skill set and can be extremely demanding.

- **Economic Pressure:** As of August 2024, the breakeven point for validators is around 30,000 SOL in staked assets. Validators below this threshold are likely operating at a loss, and in the worst case, may be unable to continue operations. While the Solana Foundation provides staking subsidies to address this issue, this support is not indefinite, leaving many small and medium-sized validators in a difficult position.

2.1.3 Challenges for the Network

- **Decentralization and Security:** Decentralization of the network is directly linked to security. The presence of small and medium-sized validators and decentralized staking helps maintain the distribution of voting power in Proof of Stake (PoS) systems. This reduces the risk of concentrated power in a few validators, which could otherwise lead to malicious actions. However, in reality, staking tends to concentrate in large validators, making it difficult for new validators to attract stakes.

- **Barriers to Entry for New Validators:** The complexity and costs associated with managing stakes make it practically difficult for investors to stake with new validators. If the number of new validators continues to decline, it could negatively impact the security, expansion, and mass adoption of the network. Promoting the growth and decentralization of new validators is crucial for the future of Solana.

2.2 How elSOL Solves These Challenges

elSOL (Enhanced Linkage SOL) is a Liquid Staking Token (LST) managed by the team behind the open-source Solana validator tool "solv." It addresses all the aforementioned challenges through the following features:

- **Refined Distributed Delegation Strategy and Monitoring Bot:** elSOL continuously monitors the status of validators to which it delegates stakes, aiming to minimize downtime while maximizing returns. During this process, users simply need to hold elSOL, freeing them from the

complexities of managing their staking. This significantly reduces the need to monitor validator activity, thereby lowering management costs.

- **Liquidity and Additional Earnings:** elSOL can be used to provide liquidity in LP pools such as Orca, enabling users to earn even higher returns. Moreover, it offers immediate liquidity with no lock-up periods, allowing users to convert elSOL into SOL or USDC at any time, thus being responsive to sudden liquidity needs.

- **Utilization of solv's MEV Mode:** solv's MEV mode automates validator updates and operational tasks, reducing operational costs. This mode automatically calculates rewards, distributes voting costs, and converts profits into elSOL, enabling users to earn staking rewards effortlessly. Reference (solv): https://solv.epics.dev/

- **Automated Validator Management Services by Validators Solutions:** By utilizing solv's automated validator management services, the rewards from these validators are automatically converted into elSOL. This allows users to manage validators with minimal effort, automating their asset management.
  Reference (Validators Solutions): https://validators.solutions/

- **Ownership Incentives and Ecosystem Decentralization:** elSOL holders are eligible to receive airdrops of Validators DAO's VLD tokens based on the amount they hold. These VLD tokens can be converted into veVLD, which grants voting rights. By voting for new validators, users can support the decentralization of the ecosystem, thereby contributing to the overall security of the network.

- **Easy Transition and Reduced Management Costs:** Existing staked assets can be easily converted into elSOL through the web interface, enabling users to benefit from elSOL's delegation strategy and the enhanced security of the Solana network while reducing management costs and earning staking rewards.

Through these features, elSOL enhances the decentralization and security of the Solana network, creating an environment where more users can enjoy the benefits of staking. As a result, staking becomes more decentralized, improving the overall security of the network and supporting the healthy growth of the Solana ecosystem.

3. How does it work?

elSOL is an incentivized Liquid Staking Token (LST) designed to maximize security and yield within the Solana network. This section provides a detailed explanation of the technical mechanisms and operational methods of elSOL, and how it benefits users.

3.1 Utilizing the Solana Foundation's Official Staking Pool Program

elSOL leverages the Solana Foundation's officially provided Staking Pool Program without customization. This program was designed and implemented by the Solana Foundation to enhance the security of the Solana network and mitigate risks associated with over-concentration of staking on specific validators. When staking is concentrated on a small number of validators, the entire network becomes more vulnerable to attacks, increasing the risks of censorship and centralization.

By distributing staking more evenly across the network, this program helps to reduce reliance on a few validators, promoting the overall health and decentralization of the network. This design prevents any single entity from controlling the network, minimizing the risks of tampering and manipulation.

Implemented in 2021, this program has undergone more than 10 rigorous audits, making it one of the most secure staking pools on Solana.

Reference (Solana Documentation - Stake Pool Introduction): https://spl.solana.com/stake-pool

Token Address: ELSoL1owwMWQ9foMsutweCsMKbTPVBD9pFqxQGidTaMC
Token Name: Enhanced Linkage SOL
Tick: elSOL

elSOL - Solscan: https://solscan.io/token/ELSoL1owwMWQ9foMsutweCsMKbTPVBD9pFqxQGidTaMC
elSOL - Orca:
https://www.orca.so/?tokenIn=So11111111111111111111111111111111111111112&tokenOut=ELSoL1owwMWQ9foMsutweCsMKbTPVBD9pFqxQGidTaMC
elSOL - Jupiter: https://jup.ag/swap/SOL-elSOL
elSOL - Sanctum: https://app.sanctum.so/trade/SOL-elSOL

3.2 The Mechanism of Staking Rewards in elSOL

elSOL's staking rewards are accumulated through Solana's official staking pool program. This mechanism works as follows:

1. When a user deposits SOL into the selected staking pool, they receive staking pool tokens (elSOL) that represent their share of the stake.
2. The staking pool then delegates the stake to selected validators.
3. The value of elSOL tokens increases as rewards are added to the total amount of SOL in the pool. Through this mechanism, simply holding elSOL allows staking rewards to automatically accumulate, increasing the token's value over time.

A Specific Example:

For instance, if a user deposits 100 SOL into the staking pool, they receive 100 elSOL tokens. At this point, 1 elSOL is equivalent to 1 SOL.

After 1 Year: Assuming an annual percentage yield (APY) of 7%, the total SOL in the pool increases to 107 SOL. However, since the total number of elSOL tokens remains unchanged, the value of each elSOL increases to 1.07 SOL.

At Withdrawal: When the user decides to convert their elSOL back to SOL, the 100 elSOL tokens will be exchanged for 107 SOL.

In this way, simply holding elSOL tokens allows the rewards to be automatically reflected and the value to increase. This system enables users to earn staking rewards without requiring additional procedures or management.

3.3 Using elSOL

elSOL can be used to provide liquidity in LP pools such as those on Orca, allowing users to aim for returns higher than the staking rewards alone. (However, aiming for higher returns comes with increased risk. Always NFA/DYOR.) Additionally, elSOL can be instantly converted into SOL or USDC, enabling users to maintain liquidity while earning staking rewards. This allows for flexible responses to sudden liquidity needs.

elSOL LP Pool on Orca:
https://www.orca.so/pools?tokens=ELSoL1owwMWQ9foMsutweCsMKbTPVBD9pFqxQGidTaMC

3.4 Incentives for Holding elSOL

elSOL is an incentivized Liquid Staking Token (LST) that offers holding incentives. elSOL holders are eligible for the VLD token TGE (Token Generation Event) airdrop and a vesting airdrop over ten years from Validators DAO. By staking VLD tokens with a specified lock period, users can acquire veVLD (Vote Escrowed Tokens: veTokens) voting rights, which can be used to support the decentralization of the ecosystem by voting for new validators.

Validators DAO: https://dao.validators.solutions/

Reference (CoinGecko: What are veTokens and Understanding veTokenomics): https://www.coingecko.com/learn/vetokens-and-vetokenomics

3.5 elSOL's Decentralized Delegation Strategy

elSOL aims to enhance staking decentralization and network security through a refined delegation strategy.

40% - High-performance validators operated by the solv development team: These validators utilize high-spec servers and high-bandwidth networks, ensuring no downtime during operations. They offer zero staking fees due to the presence of MEV (Maximal Extractable Value) rewards and block rewards, making them highly efficient for staking.

30% - Validators participating in the MEV Premium Plan from Validators Solutions: Validators participating in the MEV Premium Plan from Validators Solutions: This automated service, operated under the same high-performance conditions as the solv team's validators, is highly reliable and is chosen as a delegation target for elSOL.

30% - Voting via veVLD: elSOL holders can mine VLD tokens and convert them to veVLD, allowing them to exercise voting rights for new validators and support network decentralization.

4. Conclusion

elSOL plays a crucial role in the long-term success of the Solana ecosystem. By significantly reducing the complexity of staking management for users and enabling sustainable validator operations, it promotes both network security and decentralization. Leveraging blockchain technology's incentive structures and the power of open-source software, elSOL addresses these critical challenges, contributing to the growth, development, and sustainable innovation of the Solana network.

Join us as an elSOL holder and help build the future of the Solana ecosystem together.

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Discord: https://discord.gg/C7ZQSrCkYR