

[ARC] onboard rETH (rocket pool ETH) to Aave V3 ethereum market

References:

Link to:

- Website: <https://rocketpool.net/>
- Whitepaper: [Rocket Pool — Staking Protocol Part 1 | by David Rugendyke | Rocket Pool | Medium](#)
- Documents: [Developer Documentation | Rocket Pool](#)
- Dune: https://dune.com/rp_community/rocketpool
- Github: <https://github.com/orgs/rocket-pool/repositories?type=all>
- source code for the system(s) that interact with the proposed asset, [GitHub - rocket-pool/rocketpool: A next generation decentralised Ethereum proof of stake network and pool, currently in beta and built to be compatible with Ethereum 2.0 and the Beacon Chain.](#)
- Ethereum contract address: <https://etherscan.io/token/0xae78736cd615f374d3085123a210448e74fc6393?a=0xba1222222228d8ba445958a75a0704d566bf2c8>
- Audits:
 - 4/2021: [Rocketpool | ConsenSys Diligence](#)
 - 5/2021: <https://rocketpool.net/files/sigma-prime-audit.pdf> 1
 - 9/2021: [publications/RocketPool.pdf at master · trailofbits/publications · GitHub](#)
 - 11/2021: <https://rocketpool.net/files/sigma-prime-fix-review.pdf>
 - 6/2022: <https://rocketpool.net/files/sigma-prime-audit-redstone.pdf>
 - 6/2022: <https://rocketpool.net/files/consensus-audit-redstone.pdf>
 - 4/2021: [Rocketpool | ConsenSys Diligence](#)
 - 5/2021: <https://rocketpool.net/files/sigma-prime-audit.pdf> 1
 - 9/2021: [publications/RocketPool.pdf at master · trailofbits/publications · GitHub](#)
 - 11/2021: <https://rocketpool.net/files/sigma-prime-fix-review.pdf>
 - 6/2022: <https://rocketpool.net/files/sigma-prime-audit-redstone.pdf>
 - 6/2022: <https://rocketpool.net/files/consensus-audit-redstone.pdf>
- Bug Bounty: [Rocket Pool Bug Bounties | Immunefi](#)
- Communities:
 - Discord - <https://discord.gg/ysfY9hU31>
 - Governance Discussion - <https://dao.rocketpool.net/c/governance/>
 - Governance Voting - <https://vote.rocketpool.net/#/>
 - Twitter - https://twitter.com/Rocket_Pool
 - Reddit - <https://www.reddit.com/r/rocketpool/>
 - Discord - <https://discord.gg/ysfY9hU31>
 - Governance Discussion - <https://dao.rocketpool.net/c/governance/>
 - Governance Voting - <https://vote.rocketpool.net/#/>
 - Twitter - https://twitter.com/Rocket_Pool
 - Reddit - <https://www.reddit.com/r/rocketpool/>

Summary:

This ARC presents the community with the opportunity to add rETH to the Ethereum V3 market as a reserve.

Motivation

The stETH Reserve on Aave V2 is the largest Reserve across all Aave deployments with \$1.47B in deposits, exceeding ETH (\$1.33B) and USDC (\$885M). This is partially due to several communities having built products that deposit stETH and borrow ETH as part of a rewards-maximizing strategy. The demand for stETH has increased as a result of listing stETH on Aave V2, which has increased the revenue of both Aave & Lido protocols while increasing liquidity & stability of stETH.

LSDs (liquid staking derivative) assets are strategic assets for Aave and the launch of V3 on mainnet introducing caps & emode allows to replicate the stETH success in a risk-averse environment for other LSDs assets.

Onboarding LSDs is a source of additional revenue for Aave and benefits the ecosystem as a whole because these onboarding has an effect on assets liquidity & peg resilience.

Aave has the opportunity to help ecosystem diversity and decrease the concentration of liquidity to a unique entity while supporting more staking overall and increasing Ethereum decentralization.

Rocket Pool is a prime candidate to add diversity to Aave, being the second most liquid LSD asset in the ecosystem.

Specification

1. What is the link between the author of the AIP and the Asset?

The Aave-Chan Initiative is not related in any form nor paid by Rocket Pool to push this proposal.

Increasing LSD diversity is part of the ACI delegate platform.

The ACI received support from the rocket pool team to fill this proposal with relevant data and to answer rETH-related questions.

the ACI took inspiration from [@Marceau previous ARC attempt work](#) and updated data & did edits

1. Provide a brief high-level overview of the project and the token?
2. Rocket Pool is a decentralized Ethereum staking protocol with permissionless Node Operators.
3. Rocket Pool provides a liquid staking experience for Ethereum stakers; they do not need to run a validator, and they can contribute any amount of ETH
4. rETH is a LSD token representing staked ETH.
5. The rETH liquid staking token accumulates value against ETH over time.
6. Simply swapping ETH for rETH (or buying it on a secondary market) provides access to Ethereum staking rewards.
7. Without a stake pool service, only wealthy network participants who meet the 32ETH threshold are rewarded for validating transactions.
8. Rocket Pool democratizes participation in network validation by providing a service which lowers the collateral threshold.
9. Abstracting staked ETH as rETH participants are able to retain commodity properties of their stake (transfer of ownership).
10. Explain the positioning of the token in the AAVE ecosystem. Why would it be a good borrow or collateral asset?
11. rETH is a productive asset it appreciates in value over time based on the rewards generated by Rocket Pool node operators... Wherever ETH is presently used as collateral, rETH would make a better collateral since it accrues the staking reward in addition to the underlying ETH value.
12. rETH is based on Ethereum staking returns and has a relatively low counterparty risk compared to other yield bearing tokens.
13. rETH is a good long term holding collateral but many people want the option to access the value now and so want to use it as collateral for loans.
14. rETH could be used in leverage and hedge trading strategies by borrowing/lending in Aave.
15. rETH is a standard ERC-20 token and does not rebase and so it should be technically easier to integrate into Aave.

16. Provide a brief history of the project and the different components: DAO (is it live?), products (are they live?). How did it overcome some of the challenges it faced?
17. Rocket Pool has been active in the Ethereum community for over 5 years.
18. The Rocket Pool protocol went live on 9th November 2021. It was a staged rollout with full unlimited opening on 22 November 2021.
19. rETH supply has grown to [176k rETH backed by 185.6k ETH](#)
20. The Rocket Pool protocol has a two DAO structure. More information on the Rocket Pool DAOs can be found here: [Rocket Pool — Staking Protocol Part 2 | by David Rugendyke | Rocket Pool | Medium 2](#)
21. How is the rETH token currently used?

[Balancer LP of rETH/wETH](#) is the current primary use case of rETH with a liquidity of \$53M

[Uniswap V3](#) is second with \$4.57M of liquidity

rETH is also used as collateral on makerDAO to mint DAI

[

image

1231×203 17.2 KB

](<https://europe1.discourse-cdn.com/business20/uploads/aave/original/2X/0/057156455e5ad9a6c7df8dd262465761ff8c2d81.png>)

It's likely a Aave V3 onboarding will put Aave V3 in a top position of rETH holding.

See the community-maintained [Defi Opportunities](#) document for additional use cases.

1. Emission schedule

There is no emission schedule.

rETH is only minted when stakers deposit ETH into Rocket Pool for staking.

1. Token (& Protocol) permissions (minting) and upgradability. Is there a multisig? What can it do? Who are the signers?

rETH is minted when stakers deposit ETH into the Rocket Pool deposit pool, and rETH is burnt when stakers withdraw their ETH.

- The Rocket Pool contracts do not have permissions that grant administrators mint/burn capabilities.
- Market data (Market Cap, 24h Volume, Volatility, Exchanges, Maturity)
- Market capitalisation: \$287 118 738
- 24H Volume ~\$3.75M

Decentralized exchange liquidity pools

Exchanges:

- Balancer (main source of liquidity)
- Uniswap
- Curve
- Bancor

Further information here: [Rocket Pool Explorer 4](#) and [Dune](#)

1. Social channels data (Size of communities, activity on Github)
2. Discord: [17770](#) members
3. Twitter: [34548](#) followers
4. Github: [66](#) followers

5. Contracts date of deployments, number of transactions, number of holders for tokens

The below applies to just wstETH on Optimism:

- Date of Deployment: [Sep 30th 2021](#)
- Number of Transactions: [73358](#)
- Number of holders for token: [9104](#) (liquidity pools are recorded as 1 address)

Technical Specifications

A comprehensive technical analysis has been conducted by the Maker DAO technical team here is their report:

[\[rETH\] ERC20 Token Smart Contract Technical Assessment](#)

Security Considerations

RocketPool smart contracts have been independently audited by three best-in-class audit firms:

- <https://rocketpool.net/files/sigma-prime-audit.pdf> 1
- [Rocketpool | ConsenSys Diligence](#)
- [publications/RocketPool.pdf at master · trailofbits/publications · GitHub](#)

bug bounty:

<https://immunefi.com/bounty/rocketpool/>

Risk Analysis

A comprehensive risk analysis has been conducted by the Maker DAO risk team here is their report:

[\[rETH\] Collateral Onboarding Risk Evaluation](#)

Risk parameters

While we suggest the community to wait for the feedback from risks teams Gauntlet ([@Pauljlei](#)) & [@ChaosLabs](#), the ACI suggests the following risk parameters to start the conversation.

These parameters define a non-borrowable asset with a 60% LTV matching the current very conservative risk parameters of makerDAO.

This will make rETH slightly less attractive than stETH but reflect the difference in liquidity between them. Also, we suggest waiting for more liquidity and the Ethereum Shanghai upgrade to add rETH to the ETH/LSDs emode category.

Symbol: rETH

Isolation Mode: NO

Borrowable: NO

Collateral Enabled: YES

LTV: 60%

LT: 79%

LB: 7%

RF: N/A

LPF: 0.1

Debt Ceiling: N/A

Supply Cap: 20k

Borrow Cap: N/A