

TLDR

Launchnodes has pioneered Impact Staking of ETH through several initiatives, since launch in 2020. Impact Staking is the process of using staking returns to fund projects that address climate, infrastructure and inequality issues across communities globally. Impact Stakers pledge a proportion of the rewards that they would typically receive from staking, while receiving their initial staked capital (ETH) back at an agreed time. Projects which receive funding from Impact Staking are required to provide agreed, clear data and metrics which demonstrate the efficacy of the funding that their project has received. In this way, Impact Stakers can closely monitor the impact their commitment has made, with the most impactful projects expected to receive ongoing funding, and ineffective projects identified and remedied quickly.

This grant proposal is to enable Lido stakers to pledge some or all of their staking rewards to projects that require ongoing funding. Projects are expected to include initiatives from UNICEF, GiveDirectly, Save The Children and other leading global organisations. It is anticipated that individuals and entities such as foundations and family offices will consider Impact Staking through Lido in the future.

All aspects of the web3 infrastructure and implementation for Impact Staking with Lido are intended to be fully transparent and visible in public repos and on the Ethereum blockchain.

Background

Launchnodes committed staking returns from one of its first Ethereum 2.0 validator nodes to fund vital IT equipment for Save The Children in September 2021:

<https://www.bloomberg.com/press-releases/2021-09-30/ethereum-staking-makes-its-first-social-impact-with-launchnodes-and-save-the-children>

Subsequently, Launchnodes has worked with governments, UNICEF Giga, the Ethereum Foundation and other global organisations to demonstrate how ETH staking rewards can be used to fund powerful global initiatives such as enabling internet connectivity for schools:

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](<https://www.youtube.com/watch?v=upxAMWiTnSk>)

There is a widely held belief by the general public that blockchain technologies and cryptocurrencies are a speculative gamble with no societal benefits. There is also a malaise within web3 and blockchain communities that the focus for builders in this space is heavily skewed towards financial gain at all costs. Impact Staking demonstrates that these perceptions are not indicative of the web3 community overall – and that Ethereum, blockchain and staking can be a serious tool to address the world's most pressing problems.

Invitation to Lido and our Industry

At Devcon Bogota in October 2022, and on multiple other occasions, Launchnodes has invited other staking organisations, developers, researchers, thinkers and builders to participate in Impact Staking. While we have been a catalyst, this initiative requires support from a far broader community to scale to levels where significant global impact can be realised.

We have approached several ETH Staking as a Service providers and projects, and would be immensely grateful for Lido's involvement as the world's largest liquid staking provider.

Scope of Work

Launchnodes is seeking grant funding for its project: Impact Staking with Lido

There are 3 core aspects to this project, with this grant application intended to primarily fund the first component (Lido Impact Staking Smart Contract). Prototypes for the 2nd and 3rd components of this project are expected to be funded through additional ecosystem grants, from entities beyond Lido:

1. Lido Impact Staking Smart Contract

This is the core smart contract used to stake ETH via Lido for Impact Staking, and apportion a % of a user's rewards to projects for a period of time. The contract will accrue all the rewards and only allow the Impact Staker to access a percentage of the staking returns, the remaining staking returns will be sent to the organisation that the user has chosen. In keeping with enabling stakers to always be able to access their Ether, the initial ETH that customers have staked will always be liquid and available for the customer to use in Defi, to hold, or to withdraw for other purposes.

This is enabled by the following mechanism:

The smart contract mints or acquires stETH when a staker pledges a certain amount of Ether. This stETH is pledged for a

period of time (eg.12 months), with a designated proportion of rewards provided to the cause (impact project). Early exiting of this agreement by the staker is possible, however will result in a portion of the original staked ETH being sacrificed, with the remainder being returned to the liquid staker.

This is equivalent to an Impact Staker of say, 10 ETH having eg. 0.1 ETH apportioned directly to the impact project at the start of the staking process, with the remainder returned in full when the user wishes to stop staking.

This mechanism is in place to avoid the situation where a long-running project (eg. delivering a medicine programme) is terminated early because initially pledged funds disappear part-way through. The 'sacrificed' ETH amounts will be calculated to be a reasonable forecast of the total value to the impact project had the staking not been interrupted. This is challenging given that future staking yields are uncertain, therefore a simple mechanism such as an average of historic yields may be used. Stakers will be made aware of this amount before they commit to Impact Staking with Lido. With this information, stakers will be able to choose the duration of the projects that they wish to support.

We welcome any and all suggestions on how best to structure the smart contract and logic to enable the highest levels of Impact Staking and satisfaction for stakers and impact projects.

1. Impact Staking - User Interface to Pledge Returns

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This web3 interface will allow users to select the project(s) they wish to support, the time period, and % of rewards they wish to pledge.

1. Impact Staking - Project Interface and Metrics

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This web3 interface enables projects to list their projects, and to provide key

operational and performance metrics on an ongoing basis – enabling Impact Stakers to determine how effective the projects are, compared to their intended goals and outcomes. Metrics will be project dependent, examples would be 'number of trees planted', 'number of children connected to the internet' etc.

- These 2 components will be prototyped as a result of Lido grant funding, however further funding is expected from other ecosystem players and global multilaterals who wish to support Impact Staking and list their projects on the platform. The goal is for Impact Staking to span multiple blockchains, protocols and entities.

Lido Impact Staking Smart Contract

At the core of this project is a smart contract which enables users to stake their ETH with Lido, while pledging a proportion of their overall staking rewards to one of the available Impact Staking projects.

The smart contract will enable users to:

1. Stake an amount of ETH
2. Determine a proportion (%) of their rewards that they are willing to donate to Impact Staking
3. To select one of the projects available in the Project Interface based on the staker's personal interests (eg. funding internet connectivity for schools in Africa, reforestation of the rainforest etc.)
4. Determine the staker's minimum time period for Impact Staking

It is recognised that a key attraction of staking through Lido is liquidity of funds. Stakers will be entitled to withdraw their stETH at any point, as described in the 'Lido Impact Staking Smart Contract' definition above.

Users will visit the User Interface, select the proportion of their rewards that they are happy to pledge (x%), the project that their rewards will fund, and potentially their minimum time period (3 months, 6 months, 1 year, 2 years). A smart contract will be initiated in order to:

- Stake the user's ETH via Lido, by minting or acquiring stETH
- Collect 100% of all rewards for the user received from Lido
- Share x% of the rewards with the designated project
- Send the remainder of the rewards (100%-x%) to the user's wallet
- Manage a request from the staker to unstake their stETH / exit the contract

The smart contract instance will be in existence until the user wishes to un-stake their ETH from this contract. If the user

wishes to continue to stake their ETH beyond the life of the impact project, the user will receive all staking rewards - as if they were a typical Lido staker with no impact staking component. Alternatively, that user may select another impact project to share future rewards with.

As is the case currently, Lido node operators will receive a fee for managing the staking node infrastructure from the existing Lido smart contract. Any stETH deposit is subject to the current model and structure for staking.

Staking Router

Launchnodes understands Lido's plans to move from its current curated list of validator operators, to a model that allows anyone to become a Lido validator without permission. The smart contract and approach described within this proposal will be compatible with both models - and enable both existing validator operators and new service providers to support users who wish to impact stake.

Outside the scope of this grant application, Launchnodes is keen to support Lido's future validator set by offering 'Impact Staking' options connected to the Staking Router, and other beneficial options for staking.

Project Timing

We are conscious that the forthcoming Shanghai upgrade requires immense focus, new functionality and testing from Lido and the broader Ethereum ecosystem globally.

We are very keen that Impact Staking with Lido becomes a viable offering as soon after Shanghai as possible - with considerable activity expected across all forms of ETH staking, and potential new entrants and applications arising.

Launchnodes is also highly attuned to the current workload and priorities of the Lido development team, and intends to be self-sufficient through the development process of this project - relying on existing learning materials, documentation and code as far as is possible. We believe that there will very few lulls in development for Ethereum and Lido as the Surge, Verge, Purge and Splurge advance - so are keen to begin this work as soon as is possible in Q1 2023 - and liaise closely with the Lido team to schedule future reviews, in-depth testing and go-live as busy schedules allow in the following months.

Who are Launchnodes?

Launchnodes was founded in April 2020, to support individuals and organisations globally to run their own Proof of Stake blockchain nodes in a secure, scalable, cost effective way as Solo Stakers. Launchnodes has been supporting individual and enterprise customers to become self sufficient, Solo Stakers in Ethereum and over 15 of the other leading blockchains - on both public cloud, and in private data centres. Launchnodes pioneered and promoted Impact Staking in 2021, and is planning new and exciting initiatives with several global multilaterals, governments and foundations.

Grant Request

Breakdown Timeline for each of the following components:

1. Lido Impact Staking Smart Contract - 12 weeks
2. Impact Staking - User Interface to Pledge Returns (Prototype)
3. Impact Staking - Project Interface and Metrics (Prototype)

Total Project Duration: 3 months

(2 Smart Contract Engineers, 1 Front End Engineer, 1 Back End Engineer, 1 Test Engineer)

Access

Access and ongoing support relating to all features outlined in the Scope of Work proposed above is planned for at least 12 months after completion of the full scope of the proposal.

It is intended that the platform and Impact Staking as an initiative will grow at pace throughout 2023 and beyond, and that the project components will continue to be built upon, supported and maintained - either by Launchnodes directly, or through a community approach with a dedicated DAO or similar structure.

Fees and Payment

For the Scope of Work proposed above, Launchnodes is requesting a \$100,000 grant with the following structure for execution:

- 25% upon agreement
- 50% upon completion of the Scope of Works
- 25% up to 30 days after completion

We are open to accommodating DAI, at the suggestion of the LEGO committee.

It is acknowledged that the core smart contract upon which this proposal is based, requires significant scrutiny and security review before being made available publicly to users. It is expected that the costs for this audit will be significant (\$100k+) and are outside the scope of this grant application. Launchnodes is seeking further financial assistance from other entities - and engaging with supportive security review organisations – to cover this significant but vital requirement before go-live and staking of customer funds. There is potential for this security review cost to be covered by supportive 3rd party entities such as UNICEF, Save The Children or Give Directly rather than requesting further funding from the Lido DAO.