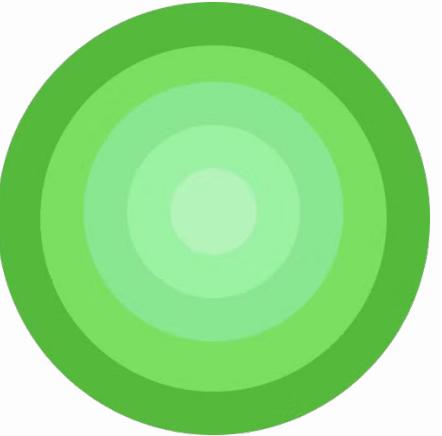


# **IMPACT EVALUATION SERVICE**



**Impact Evaluation for Public Goods**

# What is going on now?

- **Lack of impact evaluation**, and projects are getting grants without it.
- No **standardized framework for evaluation** exists.

# Problems

## Fundamental Complexity of Impact Evaluation

- Impact is the pure change made by an **intervention**, and measuring **impact** is not easy.
- Impact metrics depend on each project, thus it is **difficult to create a standardized framework for evaluation**.

## Lack of Incentives for Evaluators

- Especially, there is **no reward mechanism** for evaluation in small - medium scale projects like OSS and public goods, unlike large-scale projects handled by Social Impact Bond.

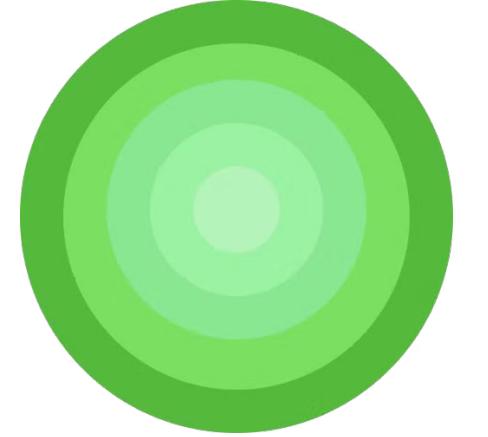
# Problems

## Fundamental Complexity of Impact Evaluation

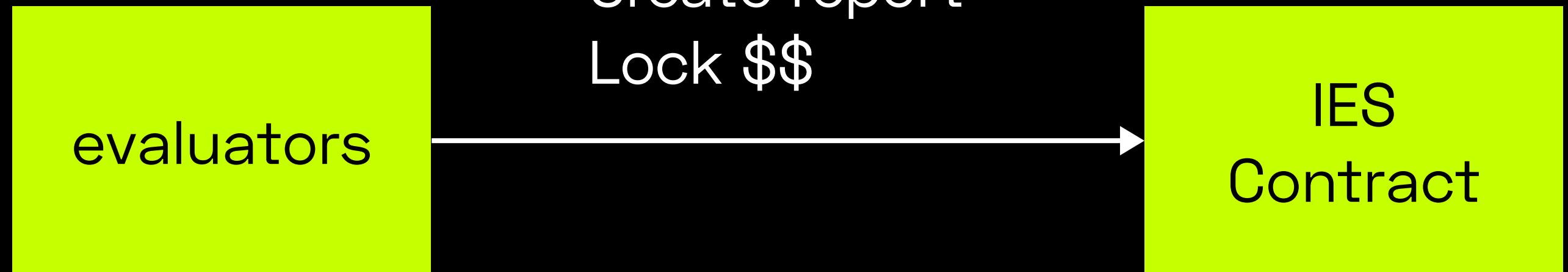
- Impact is the pure change made by an **intervention**, and measuring **impact** is not easy.
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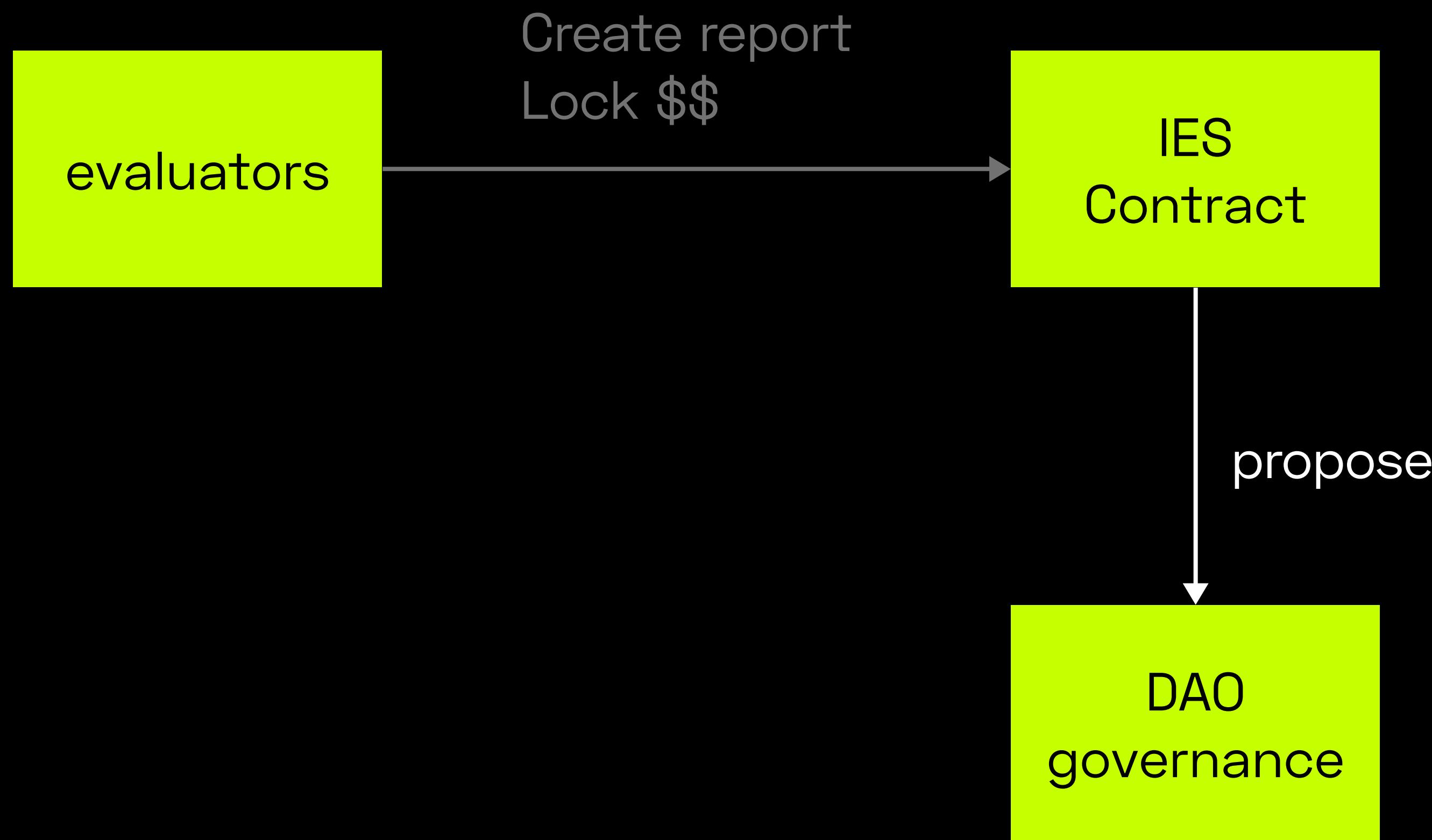
## Lack of Incentives for Evaluators

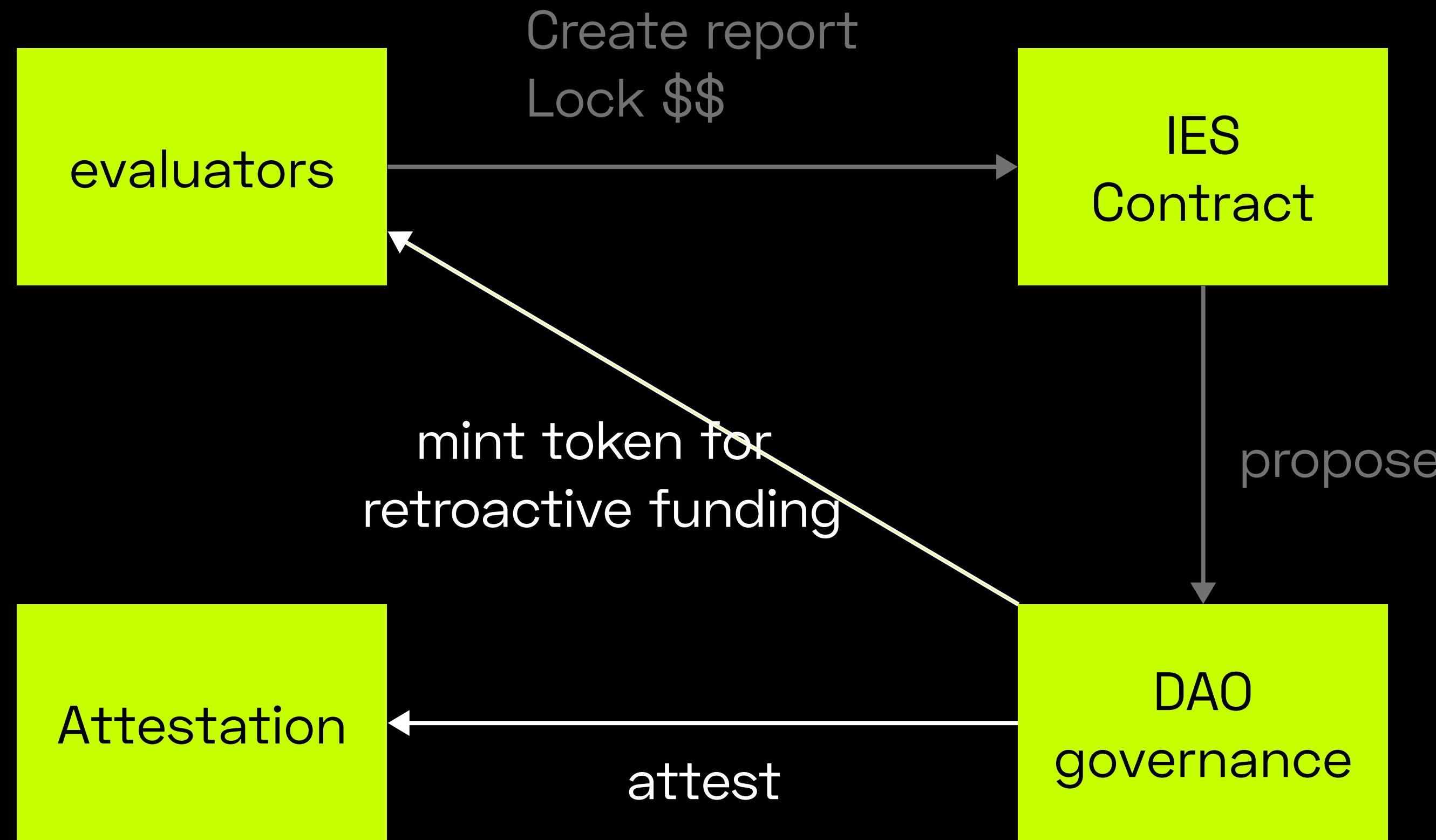
- Especially, there is **no reward mechanism** for evaluation in small - medium scale projects like OSS and public goods, unlike large-scale projects handled by Social Impact Bond.



**IES incentivize people by retroactive funding, and accumulates more project's impact evaluation data on-chain.**







## Create a new reports.

The screenshot shows the Fracton Research project page. At the top, there's a large black and white logo featuring a stylized 'F' and 'M' intertwined. Below the logo, the word 'Fracton' is written in a bold, sans-serif font. The main content area starts with a heading 'Project Description'. It includes a paragraph about Fracton Research's mission to solve coordination problems and public goods problems using blockchain-based mechanisms. There's also a 'Project Reports' section with a card for a report titled 'Fracton Research contributed to a Retrospective Quantitative Review of Crypto Grants Programs' dated 10/28/2024 with a status of 'pending'. A 'Create New Report' button is located at the bottom right of this section.

## Fill in reports with markdown.

This screenshot shows a report editing interface. The title of the report is 'Fracton Research contributed to a Retrospective Quantitative Review of Crypto Grants Programs'. The 'Description' section contains a detailed abstract about research and development aimed at achieving more effective public goods funding mechanisms by comparing various crypto grants models. The 'Background' section discusses the challenges of public goods underfunding due to the free-rider problem and how grants programs support them. It also mentions the lack of comparative studies across multiple grants programs.

## Add contributors, evidences and roles.

The screenshot shows the 'Contributors', 'Evidence Links', and 'Roles' sections of the report editor. In the 'Contributors' section, three Ethereum addresses are listed: 0xCF61eBD3613684a53E48eE85d8fBc80C5156c479, 0x63b1EfC5602C0023BBb373F2350Cf34c2E5F8669, and 0x7e6C98D3d6aC342297aF1bF6Ac280138e8BeF674. There's a '+ Add Contributor' button. The 'Evidence Links' section contains three URLs: <https://research.fracton.ventures/reports/>, <https://research.fracton.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/>, and <https://gap.karmahq.xyz/project/fracton-ventures-research/grants/0xcb404dfda59e7>. There's a '+ Add Link' button. The 'Cover Image' section shows a uploaded file named 'fracton-sq-black.png' with a preview thumbnail of the Fracton logo. The 'Roles' section includes fields for 'Role Name' (set to 'Researcher'), 'Role Description' (set to 'do some research for this reports'), and 'Role Wearers' (listing the same three Ethereum addresses as contributors). There's a '+ Add Wearer' button.

# Vote for proposal

The screenshot shows a proposal page for a blockchain-based voting system. At the top, a purple banner indicates the proposal is **PENDING**. The title of the proposal is **[Impact Report] Fracton Research contributed to a Retrospective Quantitative Review of Crypto Grants Programs**. Below the title, it shows the proposal was created by **0x5C7899cdE3eEc8528056CcE776267E9b9...**, ID **292986...5046**, and proposed on **Oct 28th, 2024**. The status bar at the top right says **Voting starts in 5 minutes**.

The interface includes tabs for **Bubble** (selected), **Timeline**, and **List**. Under the **Bubble** tab, there's a large circular icon with a wavy pattern and the text **No votes yet**. To the right, there's a sidebar titled **TALLY** which displays the **Impact Overview** (not available) and the **Status** of the proposal. The status shows the following timeline events:

- Mon Oct 28, 07:03 pm: **Published onchain** (by **0x5C78...l7cf**)
- Mon Oct 28, 07:13 pm: **Start voting period** (in 5 minutes)
- Mon Oct 28, 07:33 pm: **End voting period** (in 25 minutes)
- Execute proposal**

Below the main content, there's a section for the **Proposal** with tabs for **Description** (selected) and **Executable Code**. The **Description** tab contains the abstract and latest research link:

**Description**  
Abstract We are conducting research and development aimed at achieving more effective public goods funding mechanisms by quantitatively comparing various crypto grants models. Previous research has highlighted differences in funding distribution methods across grants programs, suggesting that a diverse approach may be necessary to effectively support a range of projects. We seek contributions to continue performing a deeper quantitative analysis of grants programs.  
Latest research: <https://research.fracton.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/>

If passed:

- The deposited tokens are **returned**.
- The Governor contract creates an Attestation.
- Send **Liquid Splits token** to the evaluator.

If rejected:

- The deposited token will be **keep locked**.

Onchain Attestation	
UID:	0x4fb9439e3d141520ad4f542784536093e555e6ffbd1a3775a80665c2af04e12
CREATED:	10/28/2024 7:51:48 pm
EXPIRATION:	REVOKE:
Never	No Yes
SCHEMA:	
#2734	0x2989a5fa235ab527276c3373cabedd103f7fc97d672ce1baa06e2136f8f1d1bb
FROM:	0xCE409480a92444df96b3B83B6441b08ba7c27ec1
TO:	0xc3593524E2744E547f013E17E6b0776Bc27Fc614
DECODED DATA:	
BYTES32 Profile Id	0xd3a08293f10a13253fef03e903b76bf03d5768bef38073ff122582a39588c3c
ADDRESS[] Contributors	[0xCF81eBD3813684a53E48eE85d8fBc80C5156c479, 0x63b1EfC5802C0023BBb373F2350Cf34c2E5F8669]
STRING Description	## Description Abstract We are conducting research and development aimed at achieving more effective public goods funding mechanisms by quantitatively comparing various crypto grants models. Previous research has highlighted differences in funding distribution methods across grants programs, suggesting that a diverse approach may be necessary to effectively support a range of projects. We seek contributions to continue performing a deeper quantitative analysis of grants programs. Latest research: <a href="https://research.fraction.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/">https://research.fraction.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/</a> ## Background Public goods often suffer from underfunding due to the free-rider problem, necessitating intervention by third parties like the government to ensure their adequate provision in traditional economics. Grants programs are crucial for supporting public goods, which are essential for achieving a positive-sum state in the crypto ecosystem. In the crypto space, these programs are generally well-operated, providing vital funding for various projects. However, while individual analyses and reviews of grants programs are common, there is a scarcity of comparative studies that analyze multiple grants programs side by side. Actually, we have researched and published a detailed, quantitative comparison of different crypto grants programs to uncover and characterize differences among them. This study particularly focuses on the decision-making bodies and methods of various grants programs: Uniswap, dYdX, Optimism, and Gitcoin. We are categorizing them into "top-down type," "bottom-up type," and "QF type (algorithmic type)." The study quantitatively compares the grant amounts and distribution methods across these programs. We can gain the result (hypothesis) that "bottom-up and QF types tend to distribute funds more evenly, with smaller variability and smaller grant amounts; in contrast, top-down types show greater variability in the amounts received by each grantee, with fewer recipients generally receiving larger grants". Proposal I propose a contribution to conduct a deeper analysis of our research. In our previous study, due to limitations in funding and time, the scope of the investigation was restricted, making it difficult to perform a thorough and detailed analysis. With the contribution from Public Nouns this time, we can keep researching. This will enable the expansion of the study subjects and a focus on collecting and analyzing more detailed data. Additionally, this contribution will provide opportunities to collaborate with more DAOs and projects that operate grants programs, broadening the scope of our research. Ultimately, I believe that our research will offer valuable insights to the community, contributing to the design and implementation of more effective grants programs. How does this initiative support Public Goods? By examining the characteristics of each grants program, there is a potential to identify entities that can provide funding to projects that are currently underserved. Our research indicates that Quadratic Funding (QF) alone is insufficient. To effectively support a diverse range of projects, it is necessary to have multiple grants programs that complement QF. These additional programs would play a crucial role in addressing the funding gaps and ensuring a more equitable distribution of resources across various initiatives. Also, we will arrange grants data of Public Nouns. A series of our research will serve as a compass for future funding decisions made by Public Nouns. This holds the potential to enable more effective funding strategies and the ability to provide financial support to areas that are different from those targeted by other programs. How is it non-excludable? The research and analysis we conduct will be published and made freely available to the entire crypto community, ensuring that anyone interested can access and benefit from our findings. This includes DAOs, individual contributors, and other stakeholders who can utilize our insights to improve their grants programs. By sharing our results openly, we ensure that no one is excluded from accessing the information, thus promoting transparency and inclusivity within the ecosystem. How is it non-rivalrous? The use of our research and findings does not diminish the ability of others to use it as well. Multiple DAOs, grants programs, and community members can simultaneously benefit from the insights provided without any depletion of the resource. Our data and analysis can be replicated and applied in various contexts without affecting the availability or quality for others, making it a truly non-rivalrous resource that enhances collective knowledge and decision-making processes across the crypto space. Why does it need funding right now? Immediate funding is crucial to capitalize on the current momentum and interest in improving grants programs within the crypto ecosystem. The rapid evolution of decentralized technologies and the increasing number of DAOs necessitate timely and relevant research to guide funding decisions. By securing funding now, we can promptly address existing knowledge gaps, provide actionable insights, and influence upcoming funding cycles to ensure more equitable and efficient resource distribution. Delaying the funding could result in missed opportunities to positively impact the community and enhance the effectiveness of grant programs in the near term. Team Size 2-3 people (Research Lead, Data Analyst, and Assistant who we may hire) Impact/Deliverables Within 3 to 6 months after being funded Expanding Survey Scope: Broaden the scope of our research to include additional grants programs and DAOs, thereby providing a more comprehensive analysis. Deeper Analysis: Conduct a more detailed and nuanced examination of the data to uncover patterns and insights that were not possible in the initial study due to resource constraints. Publication of Report: Publish a detailed report within 3 to 6 months, summarizing our findings and providing actionable recommendations for improving grant program effectiveness. Note: After 6 months (Future plan) though Making a Database: Develop and maintain a comprehensive database of grants programs to facilitate easier and more efficient analysis by researchers and stakeholders in the future. Practice of Grants Programs: Use the insights from our research to inform and potentially implement our own grants program, serving as a practical demonstration of our findings and recommendations. Recipient Address 0x41f9a3cf8B7610b29A7c18fOca228C8E79BEB3 Amount in ETH 5 ETH ## Evidence Links 1. <a href="https://research.fraction.ventures/reports/2">https://research.fraction.ventures/reports/2</a> , 2. <a href="https://research.fraction.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/">https://research.fraction.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/</a> , 3. <a href="https://gap.karmahq.xyz/project/fraction-ventures-research/grants/0xcb404dfda59e7d88a16df87966c4c4873619e8adc30b9c27b08c0bca2813982">https://gap.karmahq.xyz/project/fraction-ventures-research/grants/0xcb404dfda59e7d88a16df87966c4c4873619e8adc30b9c27b08c0bca2813982</a>
STRING Metadata UID	QmY8w9zM5HoXnGMr4U8rA5ab7dnvep74MWQb8a9SDM1mhE
ADDRESS Proposer	0xc3593524E2744E547f013E17E6b0776Bc27Fc614
STRING[] Links	[ <a href="https://research.fraction.ventures/reports/">https://research.fraction.ventures/reports/</a> , <a href="https://research.fraction.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/">https://research.fraction.ventures/reports/a-retrospective-quantitative-review-of-crypto-grants-programs/</a> , <a href="https://gap.karmahq.xyz/project/fraction-ventures-research/grants/0xcb404dfda59e7d88a16df87966c4c4873619e8adc30b9c27b08c0bca2813982">https://gap.karmahq.xyz/project/fraction-ventures-research/grants/0xcb404dfda59e7d88a16df87966c4c4873619e8adc30b9c27b08c0bca2813982</a> ]
TRANSACTION ID:	

## Tech stack

# Ethereum Attestation Service

The contents of the impact report are recorded on-chain via the Ethereum Attestation Service (EAS) schema.



## Tech stack

# Splits

Liquid Splits, an custom extension of the Splits contract, is an ERC 1155 standard token. Each time the token is minted, the allocation in the splits contract is updated.

Anyone can distribute to all token holders by simply sending money to this ERC1155 contract.

Total earned \$2,778.90

Earn 0.001% of each balance distributed

Balances

Distribute

1.100 ETH \$2,778.90

Total Balances \$2,778.90

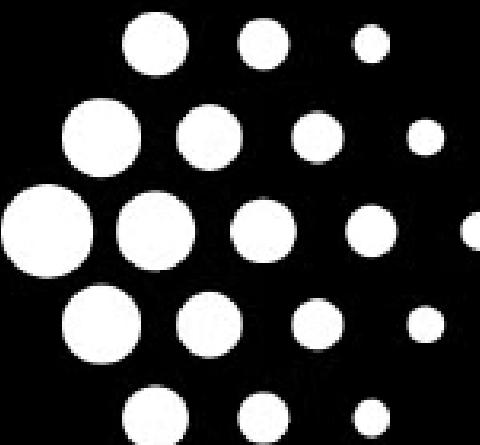
Missing tokens? [Edit your token allowlist](#)

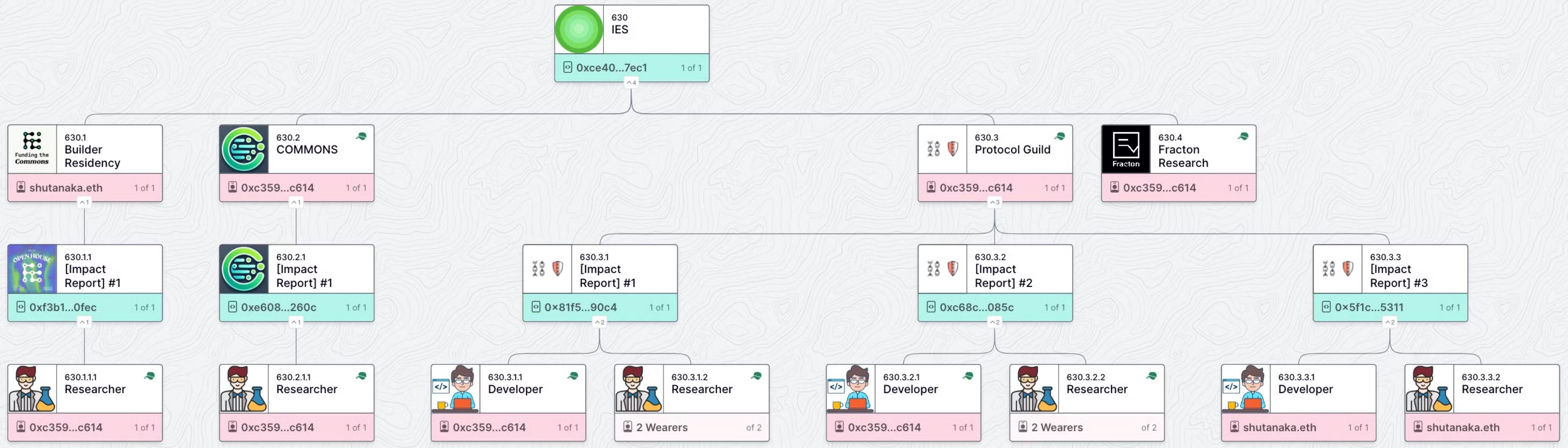
Liquid Split Holders Earning From

This Liquid Split was created by a third party

Holders (5)	Earned	Share
0xc359...c614 (You)	\$0.00	44.44%
shutanaka.eth	\$0.00	22.22%
0x93ec...10EE	\$0.00	11.11%
naokiakazawa.eth	\$0.00	11.11%
0x9B78...788f	\$0.00	11.11%

Duplicate Split Download CSV



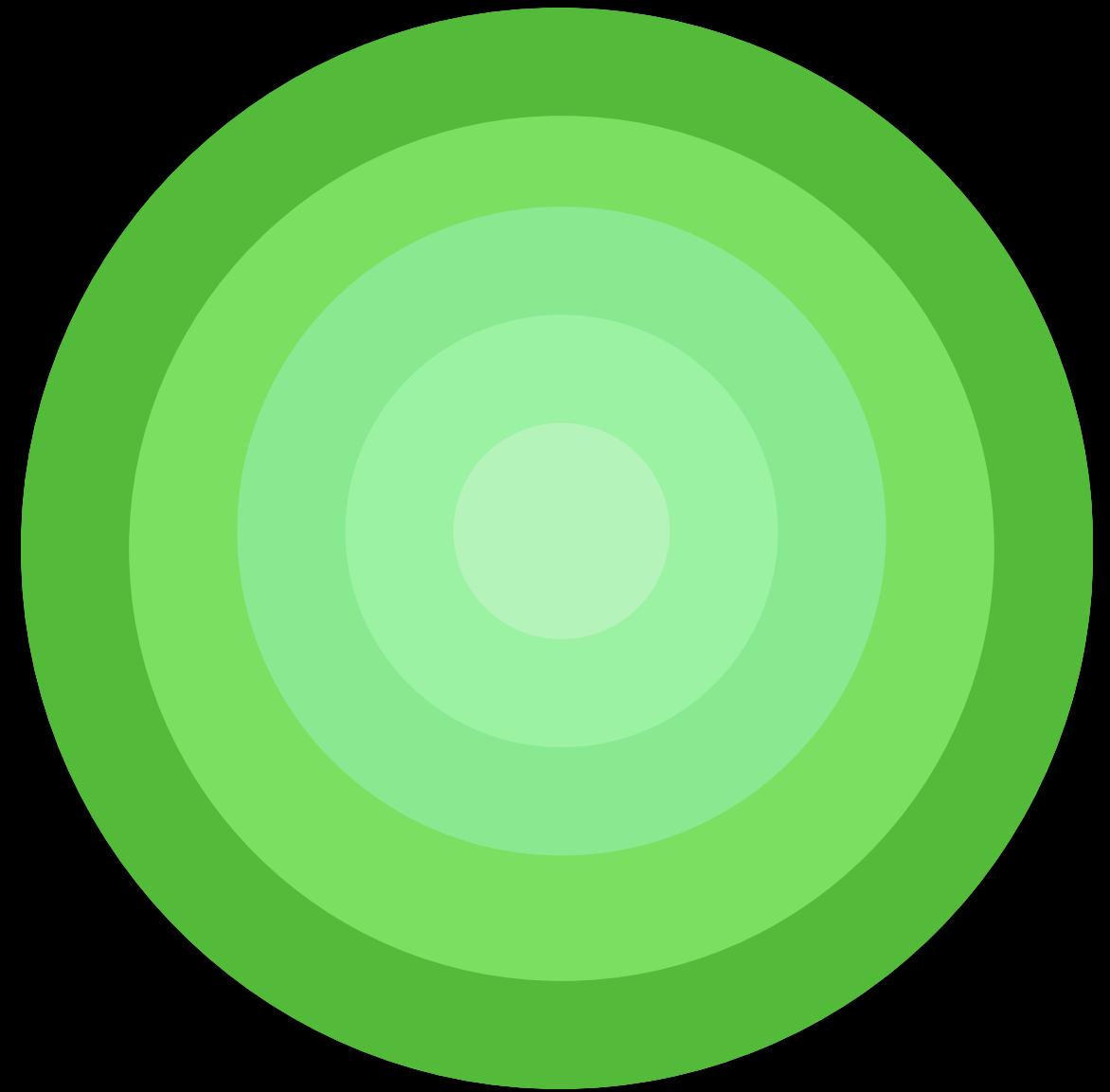


Tech stack

# Hats protocol

Hats enable to visualize/manage all contributions and on-chain roles.





Impact Evaluation Service

## Resources

Github

<https://github.com/tnkshuuhei/ies-contracts>

<https://github.com/tnkshuuhei/ies-interface>

<https://github.com/tnkshuuhei/ies-indexer>

HackMD

<https://hackmd.io@shutanaka/ies>

Website

<https://ies-interface.vercel.app/>



shu - shutanaka.eth  
R&D at Fracton Research

# Contact

X

@shutanaka\_jp

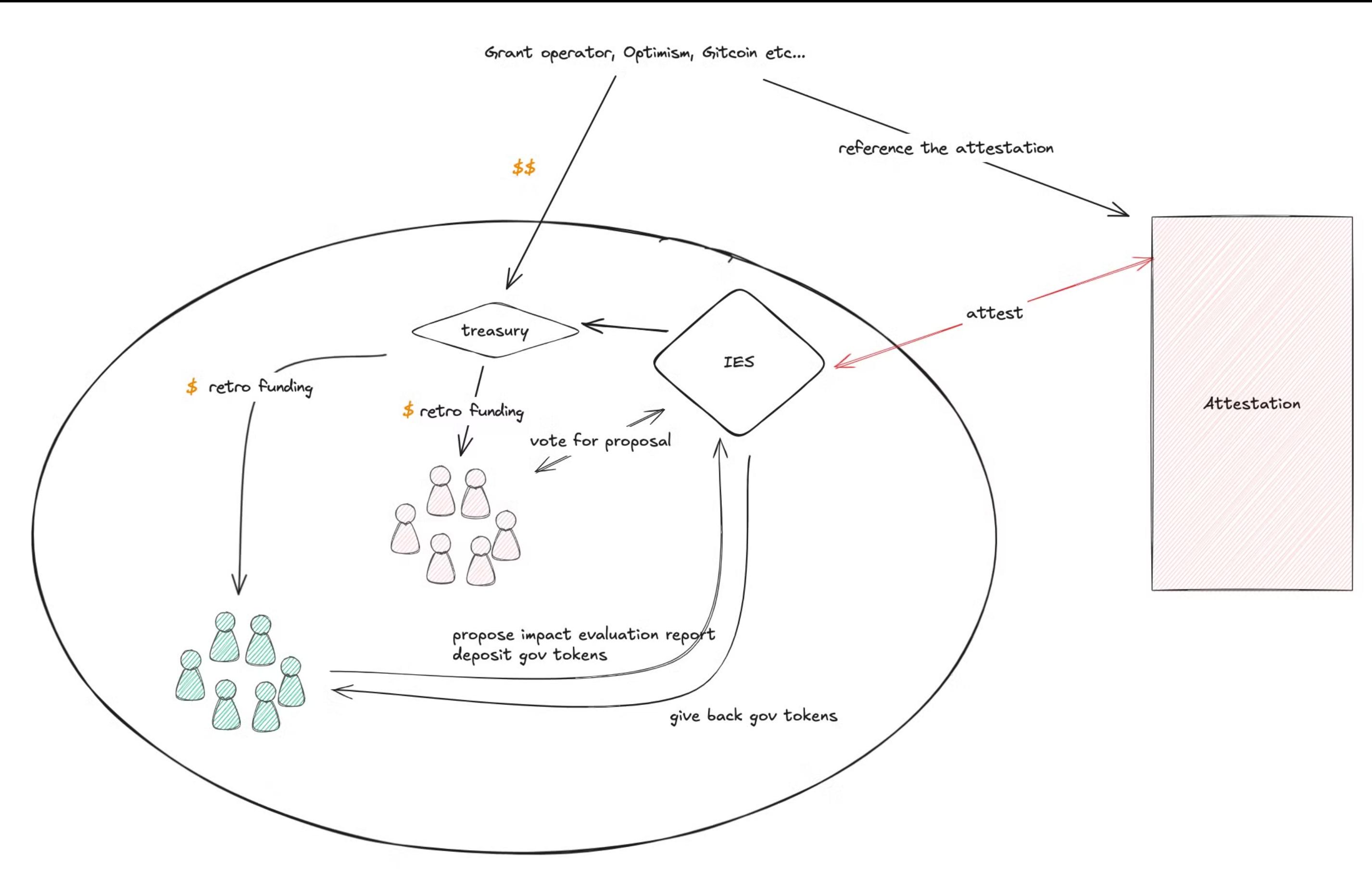
Github

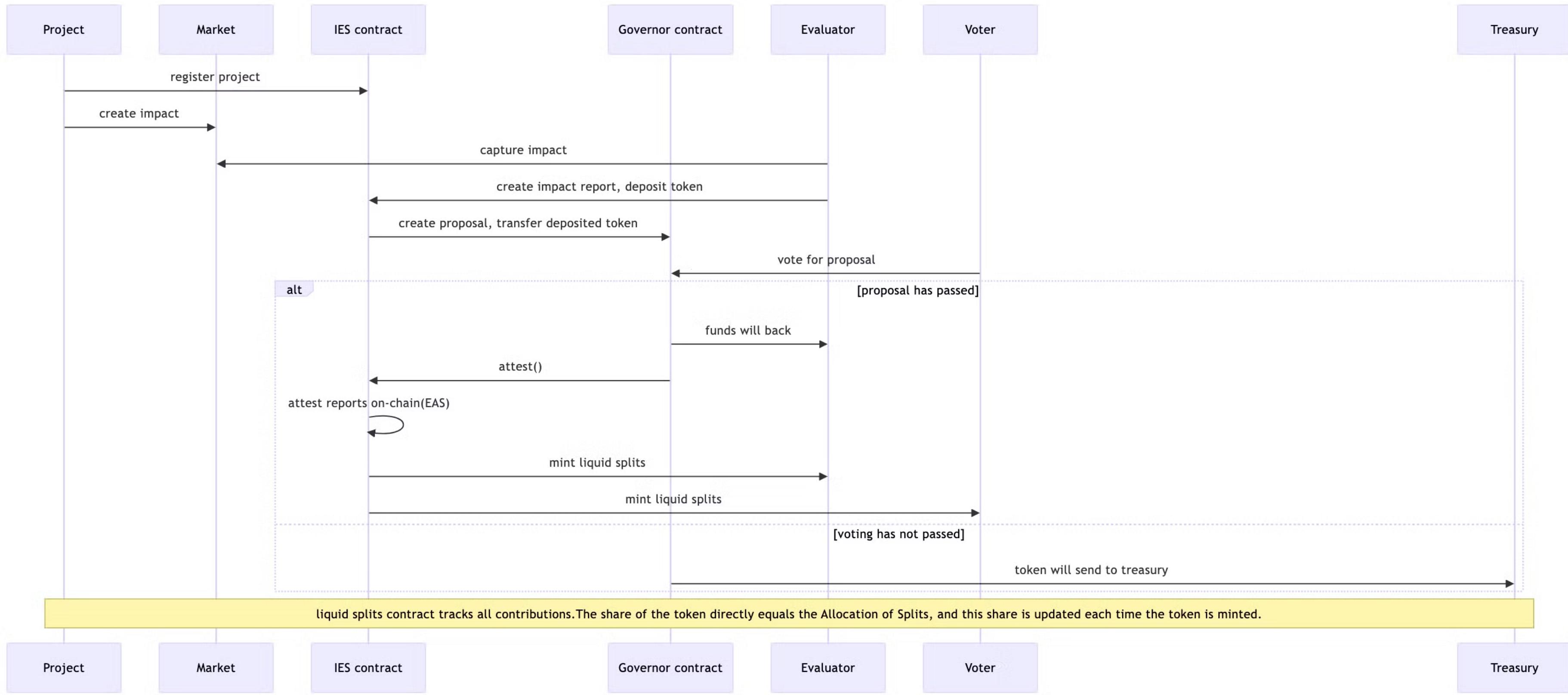
@tnkshuuhei

Telegram

@shutanaka

# APPENDIX

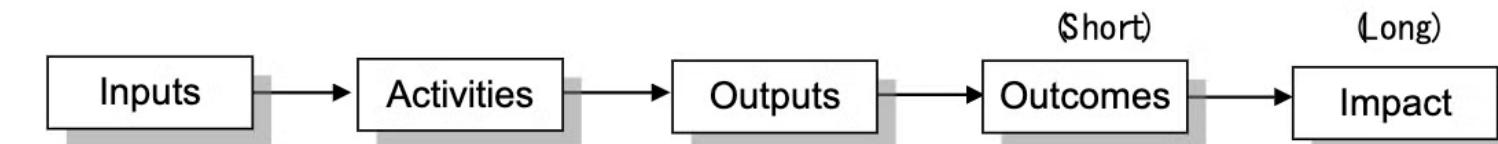




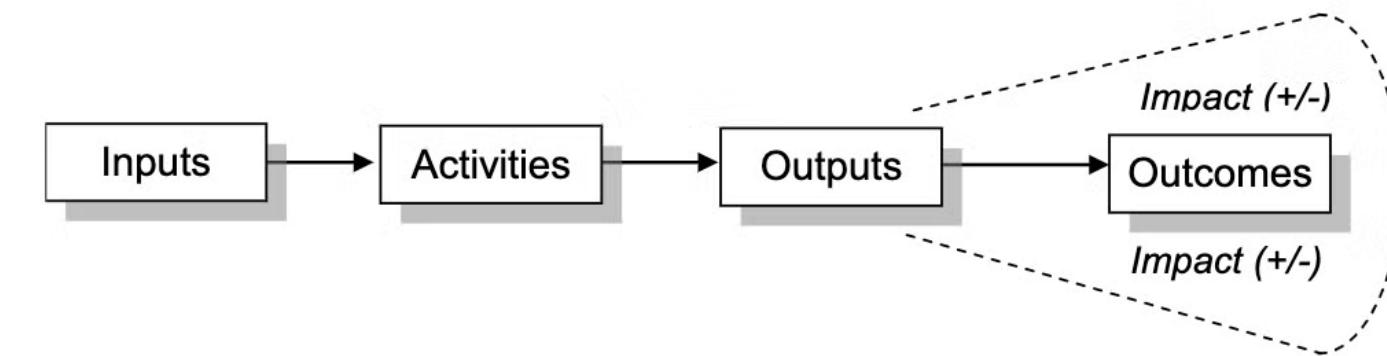
by the way...

# WTF is IMPACT?

(1) Type I 'Impact' : Long-term social/economic impact



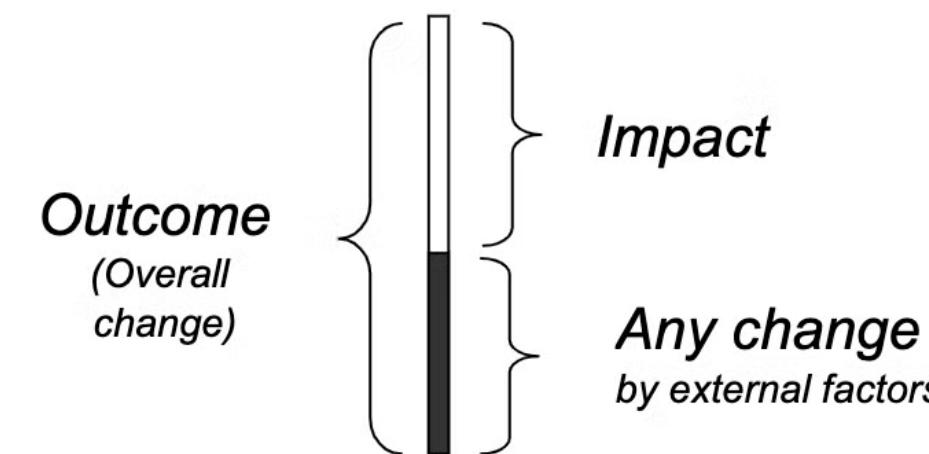
(2) Type II 'Impact' : Indirect impact (both positive and negative, and both intended and unintended)



(3) Type III 'Impact': Impact as pure change made by the intervention

(=  $\text{Outcome}_{\text{before}} - \text{Outcome}_{\text{after}}$  – any change caused by external factors).

In other word, it is a “RCT-type impact”. (“RCT” is randomized controlled trial).





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