DIOM

Decentralized Impact Outcomes Marketplace

Decentralizing Outcomes. Building Futures.

Designed by

IMPACT SCOPE

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Executive Summary

DIOM, **Decentralized Impact Outcomes Marketplace**, seeks to transform the landscape of Outcome-Based Financing (OBF) through the use of web3 technologies. DIOM establishes a decentralized, transparent, and scalable ecosystem for funding, creating, and verifying positive social and environmental impact outcomes.

With a US$4.2 trillion annual financing gap for achieving the Sustainable Development Goals (SDGs), solutions to global challenges remain underfunded. Meanwhile, in the USA, the new executive branch has made it clear that eliminating government waste in the pursuit of creating impact outcomes is a top priority.

On the outcome verification side of the equation, fragmented impact frameworks and opaque impact monitoring practices hinder the ability of the OBF sector to scale solutions effectively. A **new orchestration layer** to fund, create, and verify **impact outcomes** is urgently needed.

DIOM's innovative approach centers on the **Impact Bounty**, a smart-contract-driven mechanism existing on a public blockchain. The parameters of Impact Bounty smart contracts include precise definitions of desired impact outcomes, intervention beneficiaries, delivery deadlines, as well as verification and arbitration mechanisms. These hard-coded parameters ensure transparency, accountability, and the automation of payments based on results.

On the DIOM application, the impact outcome creation journey begins with the Impact Funder, the party which defines the outcome it wishes to see achieved, and who commissions it to be delivered. Impact Funders set the value of the Impact Bounty and then deposit the amount in an onchain escrow account. The bounty is only released after the desired outcome has been created and verified. On DIOM, Impact Funders can be national or local governments, multilateral development institutions, philanthropic organizations, impact investors, or corporate CSR programs.

As DIOM is an orchestration layer powered by a decentralized treasury, it is capable of facilitating the creation of outcomes in any sector or around any theme, from affordable housing to public health initiatives, from education

to sanitation. Any manner of social and environmental intervention can be **de-risked and delivered via DIOM**. Once a bounty has been set, Impact Creators place bids similar to the way in which they would submit quotes for RFQs or bids for public tenders. Impact Creators can be local social enterprises, commercial entities, individuals, or consortia.

On DIOM there is no direct payment or contracting between Impact Funders and Impact Creators. Instead, all legal obligations and value accrual flows through a **Decentralized Treasury**. The treasury is controlled by **Impact Stewards**, the original entities and individuals who pre-fund the Decentralized Treasury by purchasing the **$MPACT token**. It is the treasury which assumes the risk of pre-financing the impact outcomes. When impact outcomes are created for less than the value of the associated Impact Bounty, the treasury will grow in size. On the other hand, if Impact Stewards do not exercise wisdom and caution in selecting the best Impact Creators, there is a risk that the desired impact outcome will not be achieved within the assigned budget or by the required deadline. In such cases, the full Impact Bounty will not be released, and the Impact Stewards alone will bear the loss.

Apart from functioning as a de-risking mechanism and financing protocol, DIOM also enables tamper-proof, real-time verification and monitoring of impact outcomes by leveraging digital Measurement, Reporting, and Verification (**dMRV**) tools, such as onchain oracles, dynamic Proof of Impact digital twins, web3-enabled dashboards, and onchain ledgers. Crowd-sourced verification further augments on-site efforts, driving trust in the impact ecosystem.

DIOM introduces a **transformative model to bridge funding gaps and scale impact initiatives**. Its innovative and impact sector-agnostic approach paves the way for positive impact outcomes as liquid, tradable digital assets, **attracting sovereign, institutional and retail capital**. DIOM envisions a decentralized impact outcome-based financing ecosystem where verified impact outcomes drive systemic change, resilience, and regeneration, while reducing costs and friction for governments and donors.

1. Introduction

1.1 Outcome-Based Financing (OBF) - History and Challenges

History

Outcome-Based Financing (OBF), also known as results-based financing and impact-linked financing, is a fast-growing subsector of impact investing. Referencing Impact Investing: A Brief History, the term 'impact investing' was coined in 2007 by the Rockefeller Foundation, putting a name to investments made with the intention of generating both financial returns as well as social or environmental impact. Shortly thereafter, Global Impact Investing Network (GIIN) emerged during the UN General Assembly in New York in 2009 as a not-for-profit organization dedicated to building the infrastructure, activities, education, and research that will enable more effective impact investing around the world.

Over the past decades, outcome-based financing mechanisms like Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs) where payments are tied to the achievement of specific, measurable results have proven effective in delivering better social outcomes and greater value compared to traditional input-based funding models. According to the research report "Outcomes For All - Redefining Public Service Delivery" published by Better Society Capital, **outcome-based financing mechanisms have the potential to deliver up to 9x of public value for every £ 1 invested**. At the beginning of 2025, outcome-based financing market volume is estimated to be USD 185 billion.

Challenges

Despite a proven track record, outcome-based financing at scale has not been widely adopted by governments. Key challenges identified by GSG Impact and Bridges Outcomes Partnerships include: 1) annual budget cycles, 2) rigid public contracting procedures, 3) limited technical expertise, 4) availability and management of data, 5) (struggle for) political support, 6) political (in)stability, and 7) the perception of incompatibility around public-private cooperation in the delivery of public services.

In the broader impact investing space, the primary challenges facing the sector continue to be i.) fragmentation among impact frameworks, ii.) difficulties in comparing results to peers, and iii.) verifying impact data. In other words, the challenge is with measuring, verifying, and reporting impact, as confirmed in a research paper by SBTi (Science Based Target initiative).

Moreover, in its 2019 publication "Social Impact Investment: The Impact Imperative for Sustainable Development", the OECD provided a roadmap of recommendations in four specific "action areas". As can be seen in Fig. 1, the OECD report places significant emphasis on the need for “innovating new approaches and addressing data gaps”.

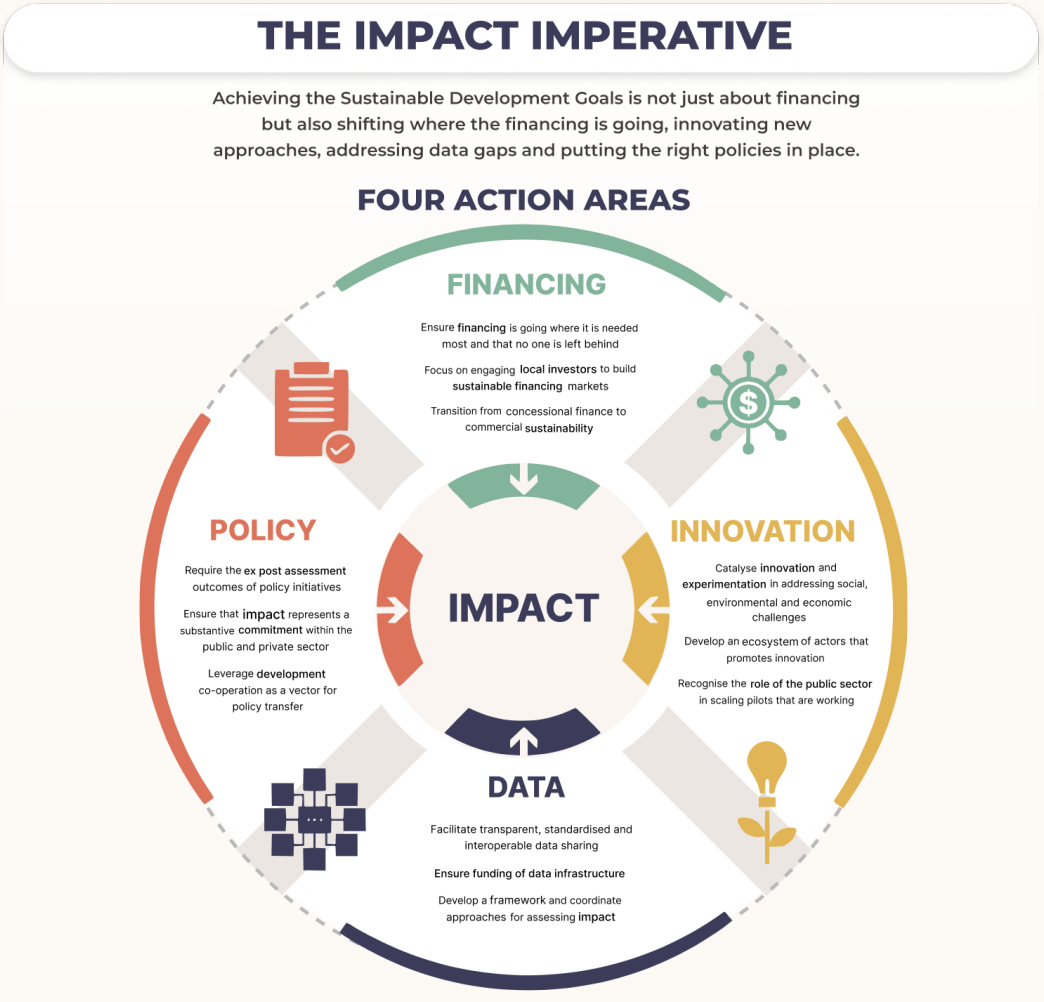

Fig. 1. The Impact Imperative - Four Action Areas (OECD)

According to the 2025 publication "Beyond Compliance: Embedding Impact through Innovative Finance" by the Schwab Foundation and World Economic Forum, corporates face challenges in aligning their philanthropy with corporate interests for a range of reasons, including difficulties in impact measurement, adopting suitable financing mechanisms, and undergoing organizational change. Corporations are increasingly facing heightened regulatory scrutiny and societal expectations regarding social impact. There is an opportunity and mounting evidence for innovative outcome-based funding models to be used to deepen the alignment of philanthropy with corporate objectives for societal good.

1.2 The Case for Blockchain and Web3 in OBF

Turning positive impact outcomes into a digital asset class

At ImpactScope, we foresee a sea change in how impact is funded, created, and verified over the next decade. According to SK Group's Center for Social Value Enhancement Studies and Rockefeller Philanthropy Advisors, "there are plausible scenarios towards a robust and **scalable ecosystem for tradable social impact in the coming 10 years"**. Meanwhile, it is the official position of the current US administration that a more transparent and cost-efficient relaunch of USAID will see distributions "secured and traced via blockchain technology to radically increase security, transparency, and traceability."

Fig. 2. Redefining Value: Innovative Finance for Development by World Economic Forum showcased DIOM as a case study of innovative finance and outcome-based funding to address social issues at scale.

Emerging technologies, particularly blockchain technology and web3 primitives, offer the infrastructure and tools needed to drive impact at unprecedented speed and scale. We believe that positive impact outcomes are poised to become a recognized asset class, represented as liquid, tradable digital assets. This evolution will attract new capital flows into the OBF market, fostering innovation and scaling solutions for social and environmental challenges.

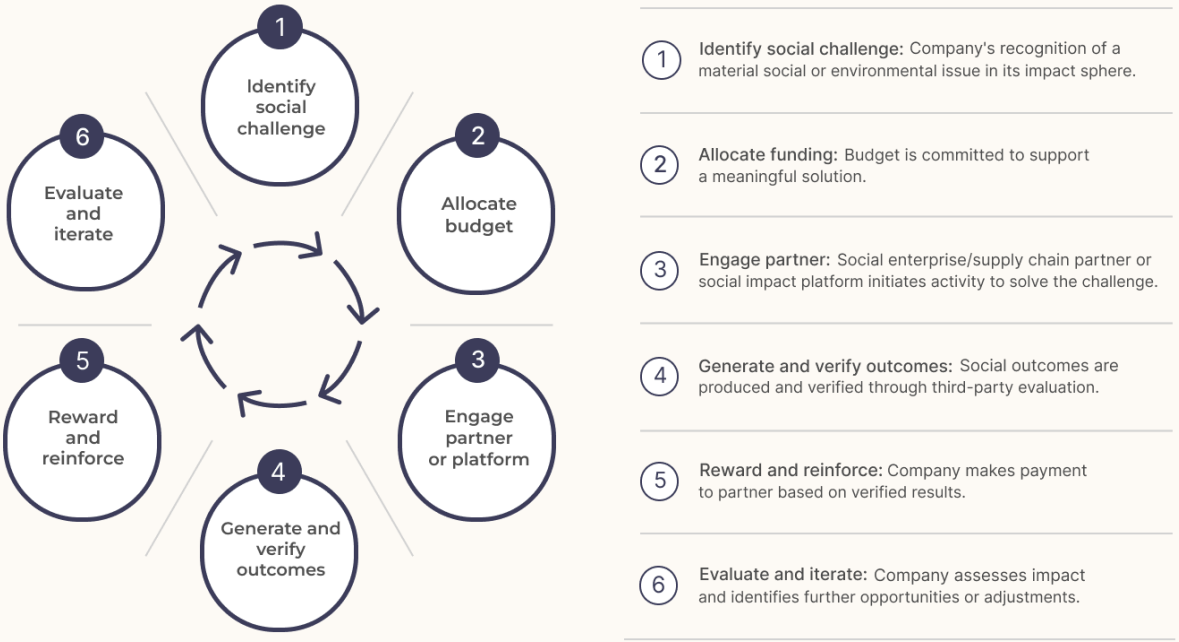

Fig. 3. How outcome-based funding approaches work by Schwab Foundation and World Economic Forum

Blockchain in Enhancing Transparency and Verifiability

Blockchain technology enhances the transparency and integrity of impact verification and funding mechanisms. It unlocks the potential for a decentralized impact financing ecosystem, efficiently coordinating resources and facilitating impact investments.

DIOM goes beyond manual and often biased impact measurement processes. Instead, it empowers impact-focused organizations with a comprehensive suite of tools for dMRV and impact outcome monetization. By leveraging blockchain's inherent transparency, traceability, and trust guarantees, DIOM enables accurate, real-time, and transparent MRV functions. This approach addresses the challenges posed by fragmented

and substandard MRV systems while laying the groundwork for a future where verified positive impact outcomes are recognized as tangible, tradable assets.

2. Designing and Building DIOM

2.1 Attributes of DIOM - Virtuous Impact Cycle

Guided by a Virtuous Impact Cycle

DIOM's design is guided by ImpactScope's Virtuous Impact Cycle, which is a positive feedback loop framework that necessitates a holistic approach to impact throughout its lifecycle. This virtuous cycle encompasses the entire journey of impact creation, from initial funding to ultimate delivery. By combining dMRV tools with this Virtuous Impact Cycle framework, ImpactScope fosters a dynamic ecosystem where impact begets value, and value circulates to fuel future impact creation.

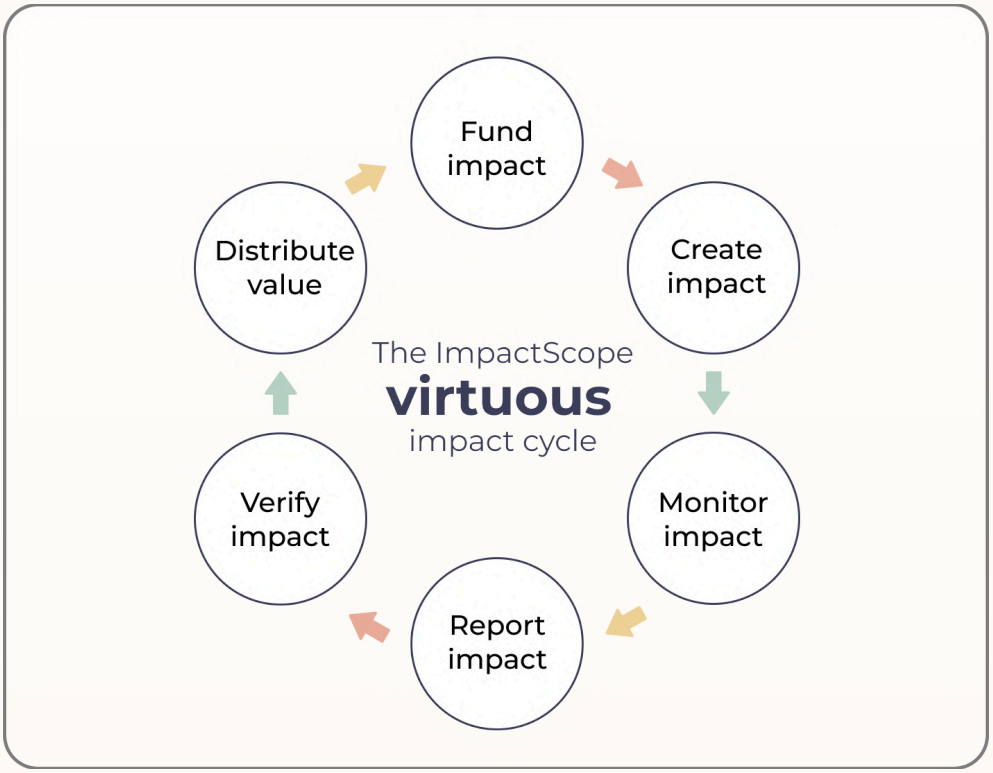

Fig. 4. The ImpactScope Virtuous Impact Cycle

Modeled Social Outcomes Contracts

When designing DIOM, inspiration was taken from existing innovations in outcome-based financing. Social Outcomes Contracts (SOCs), also known as Social Impact Bonds (SIBs), are results-linked financing mechanisms designed to fund effective social services through performance-based contracts. SOCs can be effective instruments to achieve social interventions in areas such as affordable housing, youth unemployment, homelessness, and lowering incarceration rates. Increasingly, local governments, philanthropic organizations, and international development bodies are turning to SIBs and SOCs to shift the financing risks involved in delivering impact outcomes away from themselves, and onto third-party private investors.

A typical SIB structure involves 3 parties:

1. **Impact Outcome Commissioner** (local governments, philanthropic organizations, and international development bodies);
2. **Private Investors** (foundations, impact investment funds, and SPVs); and
3. **Impact Creating Consortium** (service providers) (+1 usually being an independent Impact Verifier).

In a SIB structure:

1. Impact Outcome Commissioner contracts with Private Investors and makes payments wholly or in part to the investors based on the impact outcomes achieved, which are pre-defined at the start of the contract;
2. Private Investors provide the capital to fund Impact Creating Consortium in delivering the impact outcomes; and
3. Impact Creating Consortium is responsible for delivering the impact outcomes.

In this structure, the non-performance financial risk is no longer borne by the Impact Outcome Commissioner, such as the local government, but is instead shifted to private investors, effectively linking financial returns with positive impact outcomes.

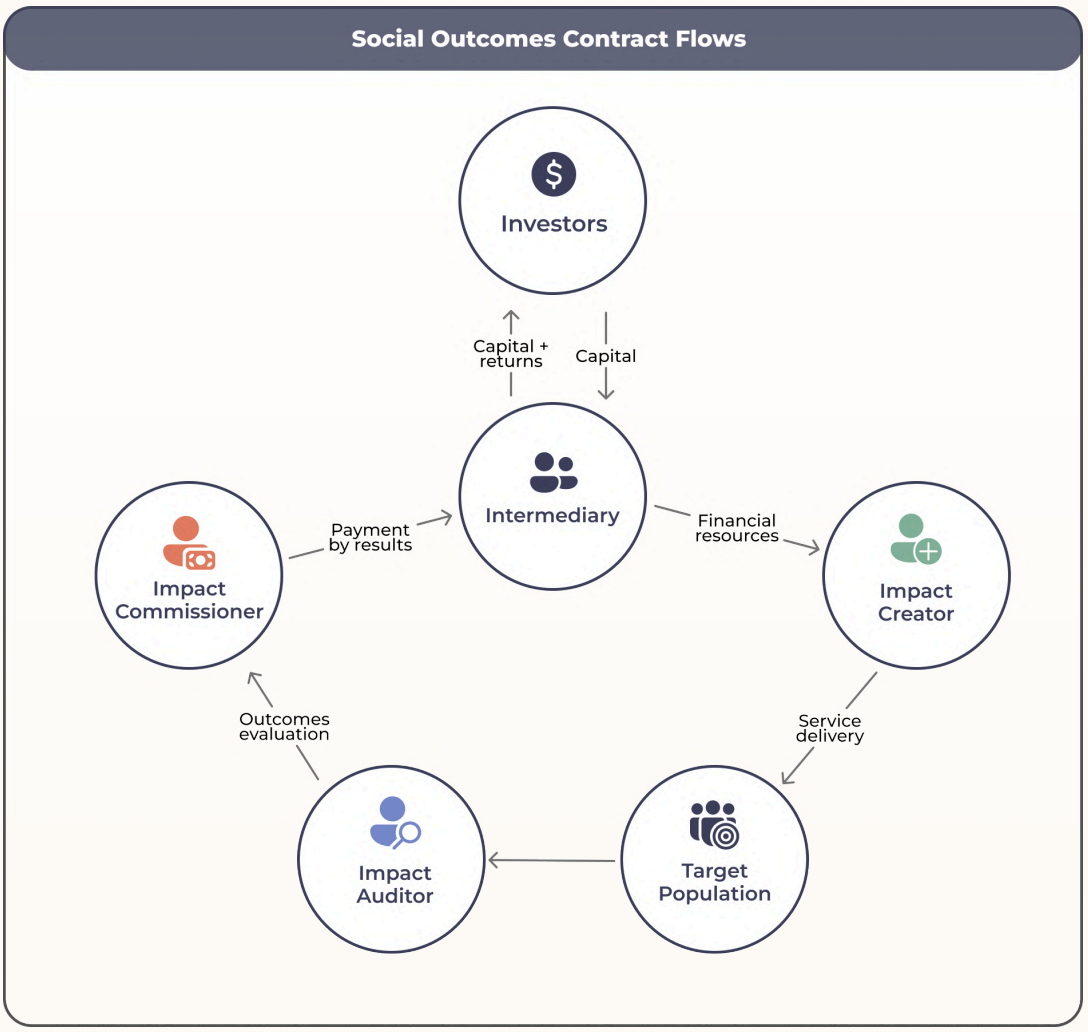

Fig. 5. The standard flow of resources and activities for a Social Outcomes Contract

Case Study - Peterborough Social Impact Bond

Background: Social Finance UK pioneered the world's first SIB in 2010 to reduce re-offending rates among short-sentenced prisoners leaving Peterborough prison in northern England.

The Challenge: Criminal Justice was chosen as there was a high re-offending rate of around 60% among short-sentenced prisoners. This was coupled with unclear statutory responsibility for their post-release support, which led to a cycle of re-entry into prison.

Structure:

1. **Impact Outcome Commissioner**: UK Ministry of Justice set the impact outcome target as "reduce reoffending of short-sentenced offenders by 7.5%". The local government was willing to pay investors a financial return on capital for the impact outcome as reducing incarceration rates not only reduces direct state expenditures of prison maintenance costs, it also reduces other socio-economic costs including loss of inmate productivity, and other collateral harm. If the service providers fail to deliver the required impact outcomes there is no financial risk to the local government.
2. **Private Investors**: the social impact bond raised £5 million from 17 investors, including trusts and foundations. The investors

hired a consortium of service providers to achieve the impact outcome, calculating that the cost of delivering the outcome would be less than the value of their contract with the local government, thus providing them an above-market financial return on their investment.

3. **Impact Creation Consortium:** One* Service[1], an umbrella organisation, was funded to respond to the complex needs of offenders. Breakthroughs in reducing re-offense rates typically take years to realize and often require close cooperation between rehabilitation experts, professional mentors, affordable housing providers, mental health services, and specialist work placement programs. The One* Service[1] was delivered by St Giles Trust, Ormiston Families, Sova, MIND, TTG Training, YMCA, and John Laing Training, and managed by Social Finance.

Impact Outcome: The social impact bond succeeded in reducing reoffending of short-sentenced offenders by 9% overall, compared to a national control group. The investors in the Peterborough SIB received payment representing their initial capital, plus a return of just over 3% per annum for the period of the investment. The success of this world's first Social Impact Bond paved the way for more OBF approaches to impact funding globally.

[1] The asterisk in the name of the umbrella organisation is part of the name, i.e, "One* Service".

2.2 Impact Bounties - Aligning Stakeholders

DIOM is at the forefront of leveraging web3 building blocks to reimagine and enhance the SOC model in the form of Impact Bounties, a mechanism that not only retains the essence of "payment for results" contracts, but also introduces several innovative features that align stakeholders interests. These Impact Bounties facilitate collaboration by structuring roles and responsibilities, and aligning incentives among all stakeholders.

DIOM's Stakeholders

1. Impact Stewards

Roles and Responsibilities:

i) Governance and Decision-Making – As $MPACT governance token holders, Impact Stewards oversee the Treasury. Stewards select Impact Creators for specific Impact Bounties and approve fund disbursements.
ii) Impact Verification – Impact Stewards collaborate with Impact Auditors to verify the impact delivered by Impact Creators, ensuring accountability and transparency.

Incentives Alignment:
The value of the $MPACT token is directly tied to the successful delivery of impact, motivating Impact Stewards to make responsible decisions, and carefully select the most suitable Impact Creators for each Impact Bounty, while overseeing the project implementation.

2. Impact Funders

Roles and Responsibilities:

i) Setting the Terms of the Impact Bounty and commissioning the impact outcome – Impact Funders establish Impact Bounties, define the

specific social or environmental outcome they want to achieve and commission them for delivery. Funders determine the scope of the project, the desired impact metrics, the delivery deadlines, and the financial reward for successful delivery.
ii) Depositing the Bounty in Escrow – In exchange for the derisking mechanism that DIOM provides, Impact Funders are required to deposit the value of the impact the wish to see created.

Incentives Alignment:
Impact Funders are incentivized by the guarantee of a de-risked impact outcome. If an Impact Creator fails to deliver the promised impact, the Treasury absorbs the loss, not the Impact Funder.

3. Impact Creators

Roles and Responsibilities:

i) Bidding on Impact Bounties – Impact Creators bid on open Impact Bounties, outlining their project proposals and demonstrating their capabilities to deliver the specified impact outcomes.
ii) Implementing Projects – Impact Creators implement projects which match their areas of expertise.

Incentives Alignment:
DIOM is a new source of revenue for Impact Creators. The end-to-end process of submitting bids and delivering impact is more transparent and frictionless than traditional RFQ applications.

4. Impact Auditors

Roles and responsibilities:

i) Verifying Impact: Impact Auditors serve as on-the-ground verification partners, ensuring outcomes meet predefined criteria.
ii) Ensuring Transparency: Using the dMRV toolkit, Impact Auditors provide real-time, transparent measurement, verification, and reporting.

Incentives Alignment:

Impact Auditors are paid for professional, accurate verification work, motivating them to maintain high standards and reliability. DIOM provides a platform where Impact Audits are permanent, evolving, and continuous.

* * *

The architecture of DIOM not only expedites impact creation by eliminating delays associated with traditional intermediary-based funding, but also provides a decentralized and transparent system. Furthermore, this departure from the traditional SOC model shields Impact Funders from the risk of non-delivery by Impact Creators. Taken together, the efficiency gained from this automated approach directly translates into quicker and more reliable impact delivery to the ultimate beneficiaries of bounties, overcoming a longstanding challenge in the conventional SOC model.

Crucially, the web3 model aligns the incentives of Impact Stewards (token holders), who govern the treasury, with those of Impact Funders, who commission the outcomes. Any failure in impact delivery directly affects the treasury and the value of the Impact Stewards' tokens, compelling them to carefully select Impact Creators. Each stakeholder's success is interconnected, fostering collaboration and focusing efforts on delivering measurable impact for ultimate beneficiaries, promoting a higher likelihood of successful impact outcomes.

Impact Bounties, Terms and Smart Contract Parameters

Impact Bounties are set up with clear pre-defined terms of rewards for achieving impact outcomes, with all parameters agreed upfront, and **smart contracts** leveraged to automate the execution of the bounties, enhancing transparency and accountability. Key parameters defined include the following:

I. **Value and Escrow**: The Impact Funder defines the value of the Impact Bounty. Bounties can be deposited in a variety of forms, from stable tokens to fiat to other agreed-upon tokens.

II. **Duration**: The time frame within which the desired impact outcome must be achieved.

III. **Payout Structure**: Whether the Impact Bounty is a lump-sum payout upon completion or distributed in partial payments as impact milestones are achieved.

IV. **Impact Auditor(s)**: The designated entity responsible for triggering payouts by verifying that the terms of the Impact Bounty have been fulfilled.

V. **Refund Deadline**: The deadline for the return of the Impact Bounty to the Impact Funder if no Impact Creator is selected.

VI. **Arbitration Mechanisms**: In cases where there is partial completion, non-completion, or no sign-off by Impact Auditors.

These smart contract parameters ensure that the terms of the Impact Bounty are clearly defined, automatically enforceable, and tamper-proof, fostering trust and efficiency.

2.3 Web3 Architecture - Connecting Impact Monetization and Verification

DIOM is rooted in the principles of decentralized finance and web3 primitives, addressing some of the most pressing challenges in the sustainability space, including the monetization of positive impact and the transparent verification of impact outcomes.

DIOM strategically adopts a two-tier architecture and connects these two layers:

1. **Impact monetization layer:** a capital-efficient system tailored to facilitate and optimize the flow of funds to create impact, while derisking the process from the perspective of Impact Funders.
2. **Impact verification layer:** this layer ensures that the capital allocated by the platform to create impact translates into tangible results.

This architecture strategically segregates functions throughout the Virtuous Impact Cycle, ensuring a comprehensive and structured approach to monetization, management, transparency, and governance.

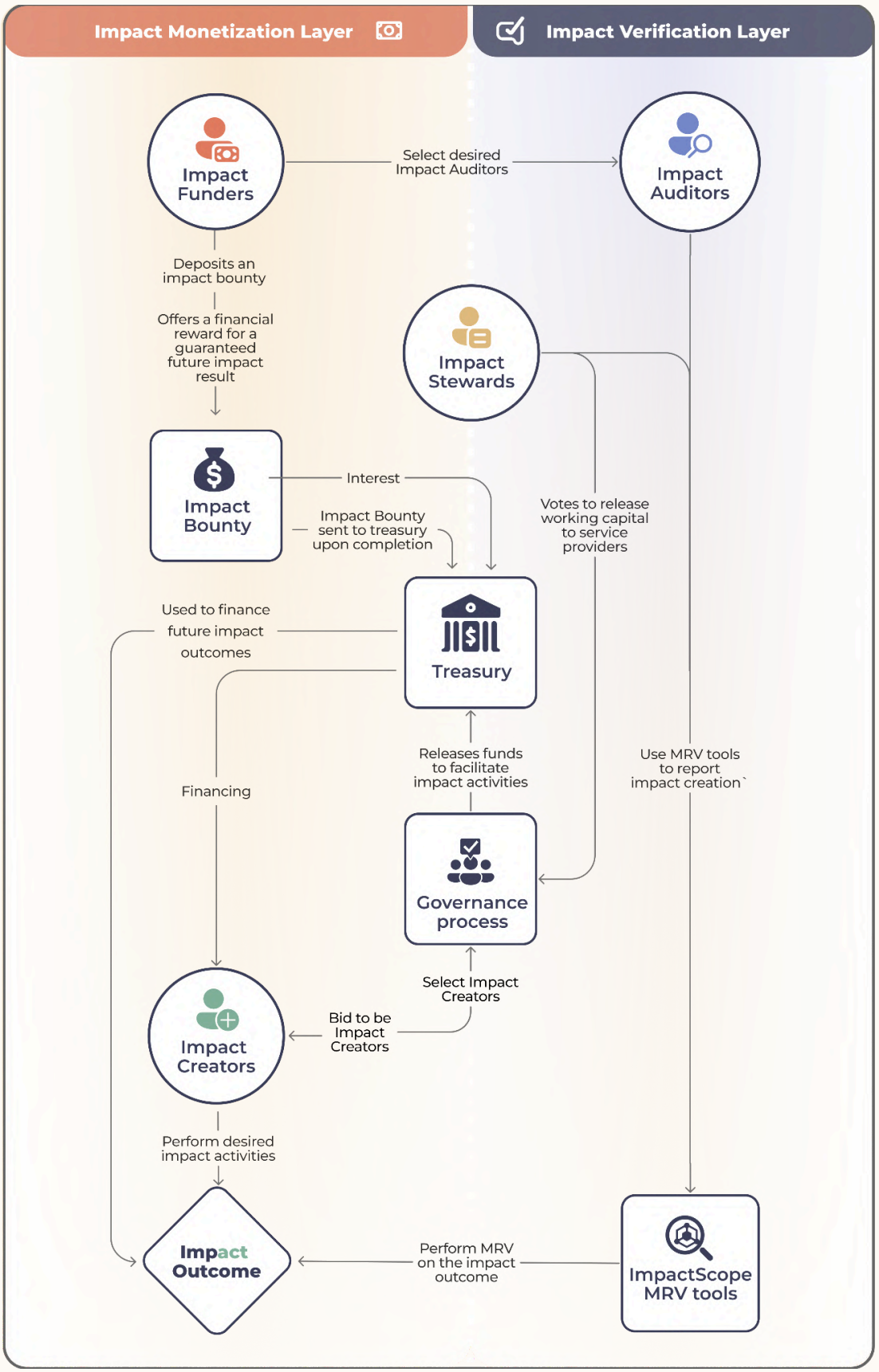

Fig. 6. Impact Monetization and Impact Verification Layers

2.4 Impact Verification - Community-governed and dMRV-powered

Automated and Community-Governed

Utilizing web3 technology and decentralized governance, DIOM ensures robust, transparent impact verification. The verification of the actual Impact Outcome is overseen by a community of Impact Stewards and carried out by specialized Impact Auditors, selected by the Impact Funder. This ensures the authenticity and alignment of outcomes with initial goals.

- **Impact Stewards**, or $MPACT token holders, can participate in verifying and approving verified impact outcomes delivered. They play a key role in governing the process and ensuring the integrity of the verification process.
- **Impact Auditors**, chosen by Impact Funders or the community of Impact Stewards, work on the ground to verify the completion and success of the impact outcomes. They utilize the dMRV toolkit (where possible) for reliable and accurate verification.

Powered by dMRV Tools

The impact verification process ensures that the capital allocated through DIOM to create impact translates into tangible and verified positive impact outcomes. Digital tools for measurement, reporting, and verification (dMRV tools such as IoT devices, geospatial technologies, web3 impact dashboards, dynamic NFTs (digital twins), as well as onchain and offchain oracles help provide real-time, transparent, and tamper-proof mechanisms for monitoring and verifying impact metrics, leveraging blockchain's inherent qualities of immutability and automation. Such tools include:

- **Dynamic NFTs** are dynamic, non-fungible tokens that offer an innovative way to monitor, display, and report on impactful activities.
    - These dNFTs are updated (mostly automatically) in real time to display monitored impact data achieved. When dNFTs are integrated with oracles, they serve as real-time, tamper-proof records, bridging the gap between BCT and sustainable impact measurement.
    - The flexibility of dNFTs means that the metadata can be used to reflect ever-changing ESG indicators and categories, including CO2 emissions, renewable energy production, and air quality, thereby bolstering sustainability reporting practices.

    - dNFTs offer an accessible and informative format for representing monitored data, making the reporting and verification process dynamic and transparent.
- **Data Oracles** such as smart meters serve as data feeders automatically recording data onchain.
- **Smart Contracts** are used as automated enforcers to verify data, enabling the issuance of dynamic NFTs, ensuring objectivity and transparency in the impact verification and reporting process.
- **Impact Dashboards** serve as important interfaces for various entities such as social enterprises, impact-focused companies, carbon project developers, and offset purchasers, providing a means to monitor and benchmark the impact generated by both themselves and specific initiatives. While each **web3-enabled Impact Dashboard** is distinct, they all share the necessity of being connected to onchain data sources, whether directly through oracles or indirectly via dNFTs. This connectivity allows for the comparison of performance metrics across diverse projects and assists in impact measurement decision-making processes for companies. Functioning as a platform for engagement, these dashboards play a crucial role in continuously measuring positive social and environmental outcomes for stakeholders. By enabling viewers to compare the performance of different impact projects against established benchmarks, Impact Dashboards concretely bridge the gaps between the amount invested and the impact created, thereby addressing the MRV data gap in impact investing.

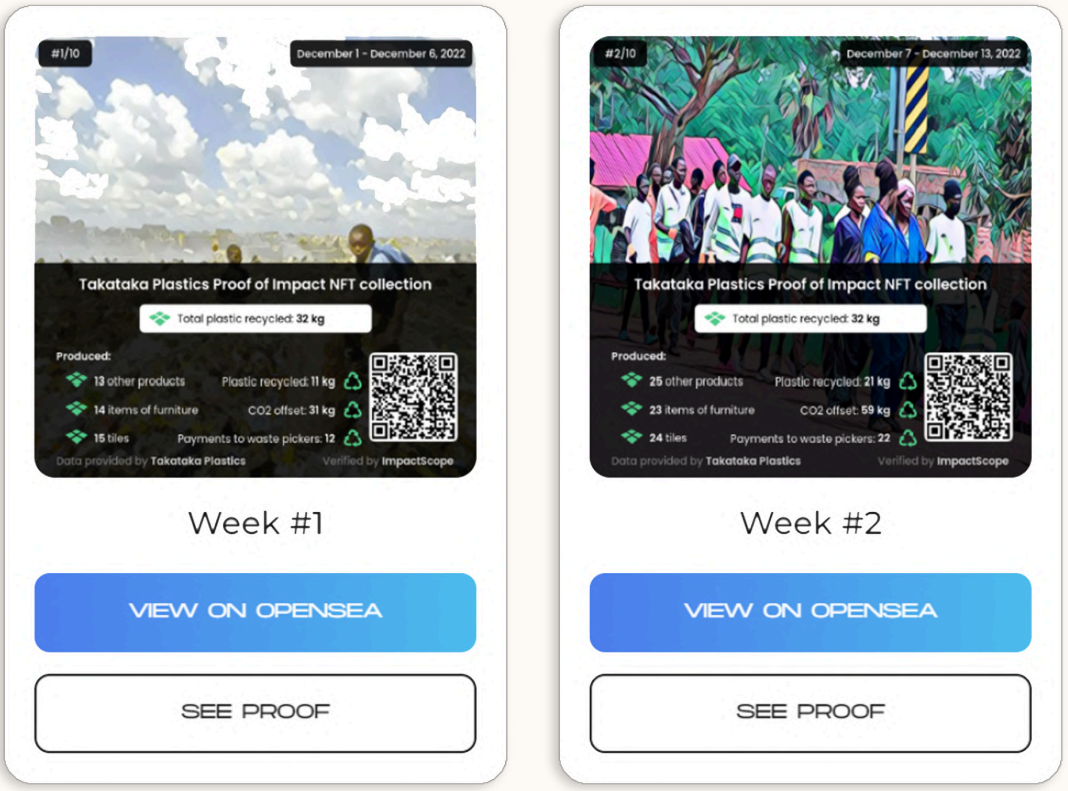

Fig. 7. Example of Proof-Of-Impact NFTs minted for a circular economy plastic recycling enterprise

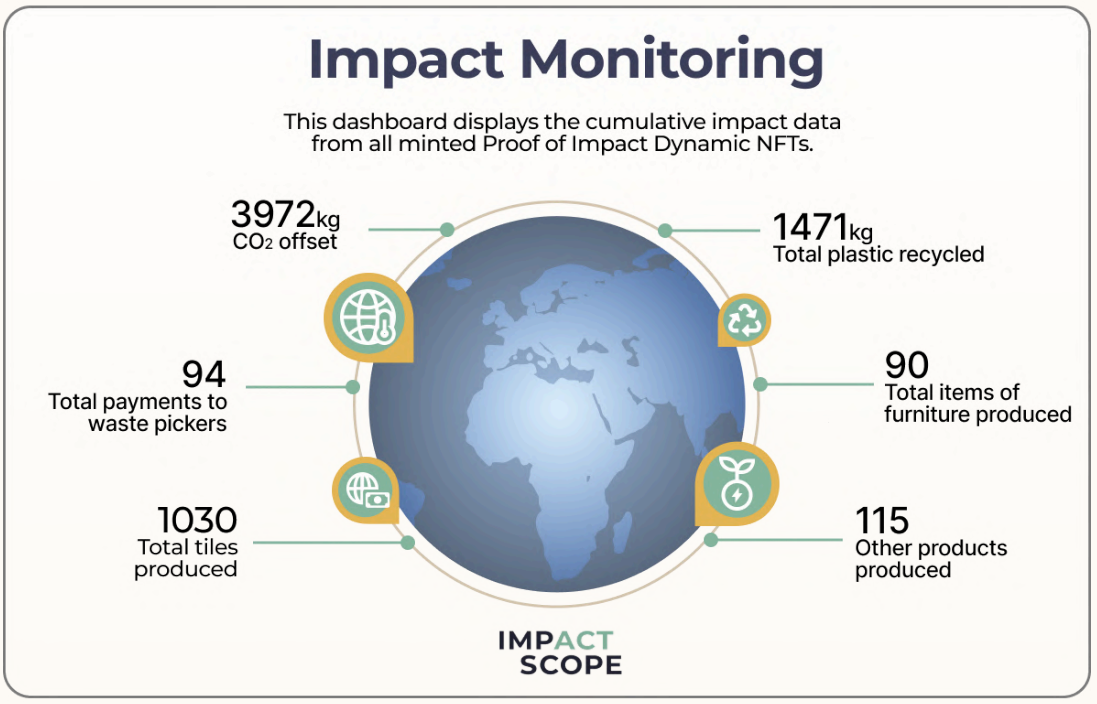

Fig. 8. Impact Dashboard for a recycling project

Case Study – Developing dMRV Tools for Siemens

As a global finalist in the Siemens Tokenize the Energy Transition Challenge, ImpactScope developed dMRV tools in collaboration with Siemens to drive transparency and automation of verifiable energy savings.

Background: With annual revenue of EUR 76 billion and 327,000 employees worldwide, Siemens, the German multinational technology conglomerate, is recognized as one of the leading global technology companies, with divisions across automation, building technology, healthcare, and transport. Over the last decade, Siemens has grown into one of the world's largest Energy Services Companies (ESCOs), with approximately one quarter of its revenue coming from its Smart Infrastructure operations. One key energy efficiency technology service Siemens offers is in the form of results-based Energy Savings Performance Contracts (ESPCs). These contracts allow its clients, such as operators of hospitals, airports, universities, and energy-intensive manufacturing plants, to implement energy efficiency technologies without upfront costs, using future energy cost savings to fund the energy infrastructure improvement project over the term of the ESPC, with any additional savings going back to the clients.

Challenge: Like many other ESCOs, Siemens faces challenges in meeting the increasing criteria and requirements of ESG reporting, both for themselves and their ESPC clients. To compound this, existing tools fall short, particularly with the growing complexity of reporting due to the exponential growth in IoT devices in buildings and consequent data production.

dMRV Solution: ImpactScope implemented a web3-enabled energy data and verification system, based on Proof-of-Impact dNFTs and an Impact Dashboard connected to impact oracles with the goal of achieving accurate, automated, and transparent impact and sustainability reporting. dNFTs were leveraged to ensure tamper-proof and automated monitoring and verification of energy data, including efficiency and savings.

- **Impact oracles** were employed to pull Smart Grid energy meter oracles and energy monitoring software data automatically through an API, providing necessary data for verification of energy efficiency.
- **dNFTs** were integrated with energy meter oracles, enabling data to be automatically recorded onchain, and **smart contracts** were employed to verify this data, leading to the issuance of dNFTs. These dynamic NFTs, acting as real-time, tamper-proof records, showcased energy efficiency and savings

along with corresponding impact metrics. The metadata, displayed data, and visual appearance of the dNFTs changed regularly as impact metrics were updated.

- **An Impact Dashboard** connected to impact oracles served as an interface for various stakeholders.

Outcome: ImpactScope showed Siemens how to utilize these dNFTs to certify and verify energy savings, track and verify carbon emissions, and create digital twins reflecting energy performance in real-time. ImpactScope's system enabled easy sharing of energy performance data, while providing transparent, tamper-proof data storage.

ImpactScope's proposed solution represented a transformative shift from the challenges posed by current centralized storage and manual processes to the advantages offered by these novel dMRV tools. The decentralized storage, smart contracts, and the transparency and immutability of data provided by dNFTs significantly reduced errors, inconsistencies, and long-term costs associated with impact and sustainability compliance.

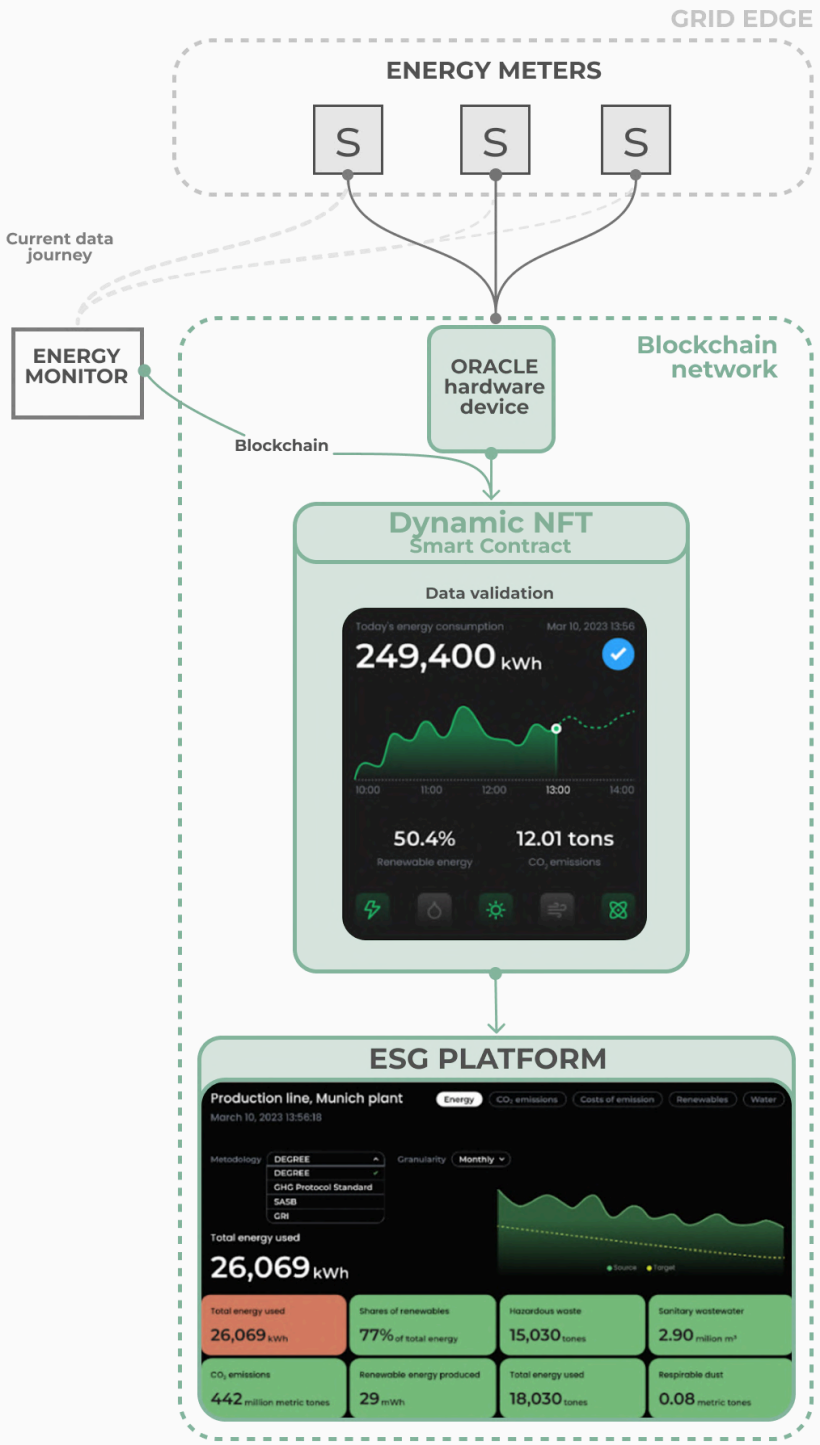

Fig. 9. Architecture and UI of the solution developed for Siemens

2.5 Impact Treasury - Financial Backbone to Drive Impact Delivery

The **Impact Treasury** is the financial backbone of DIOM, serving as both a capital source and a coordination mechanism. The treasury is seeded by allocating a portion of $MPACT token pre-sale proceeds to treasury funding. Governed by $MPACT governance tokens, the treasury ensures resources are allocated efficiently and effectively. Impact outcome creation funding is released from the treasury. Impact Bounties flow into the treasury. There is no direct value flow between the Impact Creators and the Impact Funders.

How stakeholders interact with the treasury:

I. **Impact Stewards**: As $MPACT governance token holders, Impact Stewards guide treasury operations and vote to select Impact Creators. This process determines the release of funding from the treasury.

II. **Impact Funders**: Impact Funders fund Impact Bounties, which are escrowed outside of the treasury and only released to the treasury upon successful delivery of the impact outcomes. The treasury protects Impact Funders by de-risking outcomes investments. If an Impact Creator only partially delivers a promised outcome, it is the treasury which absorbs the financial loss.

III. **Impact Creators**: Funding is released from the treasury to the Impact Creators to cover their impact outcome creation activities once their bid is selected by Impact Stewards.

DIOM redefines how stakeholders collaborate to deliver impact outcomes. By leveraging blockchain technology and web3 tools, DIOM aligns incentives among stakeholders through Impact Bounties, ensuring transparency and fostering effective collaborations among participants.

2.6 The Marketplace – Step-By-Step Guide

1. Impact Funder funds an Impact Bounty and sets the success parameters. The Bounty is locked in an escrow account and segregated from the treasury.
2. Impact Creators place bids to deliver the Impact Bounty.
3. Impact Stewards, who control the treasury, assess the bids and select the winning Impact Creator by using $MPACT tokens to vote.
4. Funding is released from the treasury to the winning Impact Creator to cover their impact activities.
5. Impact Creator delivers the impact outcome.
6. Impact Auditor monitors the progress in real-time.
7. Impact Auditor verifies the outcomes on the ground; additionally, Impact Stewards verify the reporting using web3 verification tools.
8. If the impact outcome is positively verified, this triggers the release of the Impact Bounty from escrow and into the treasury.

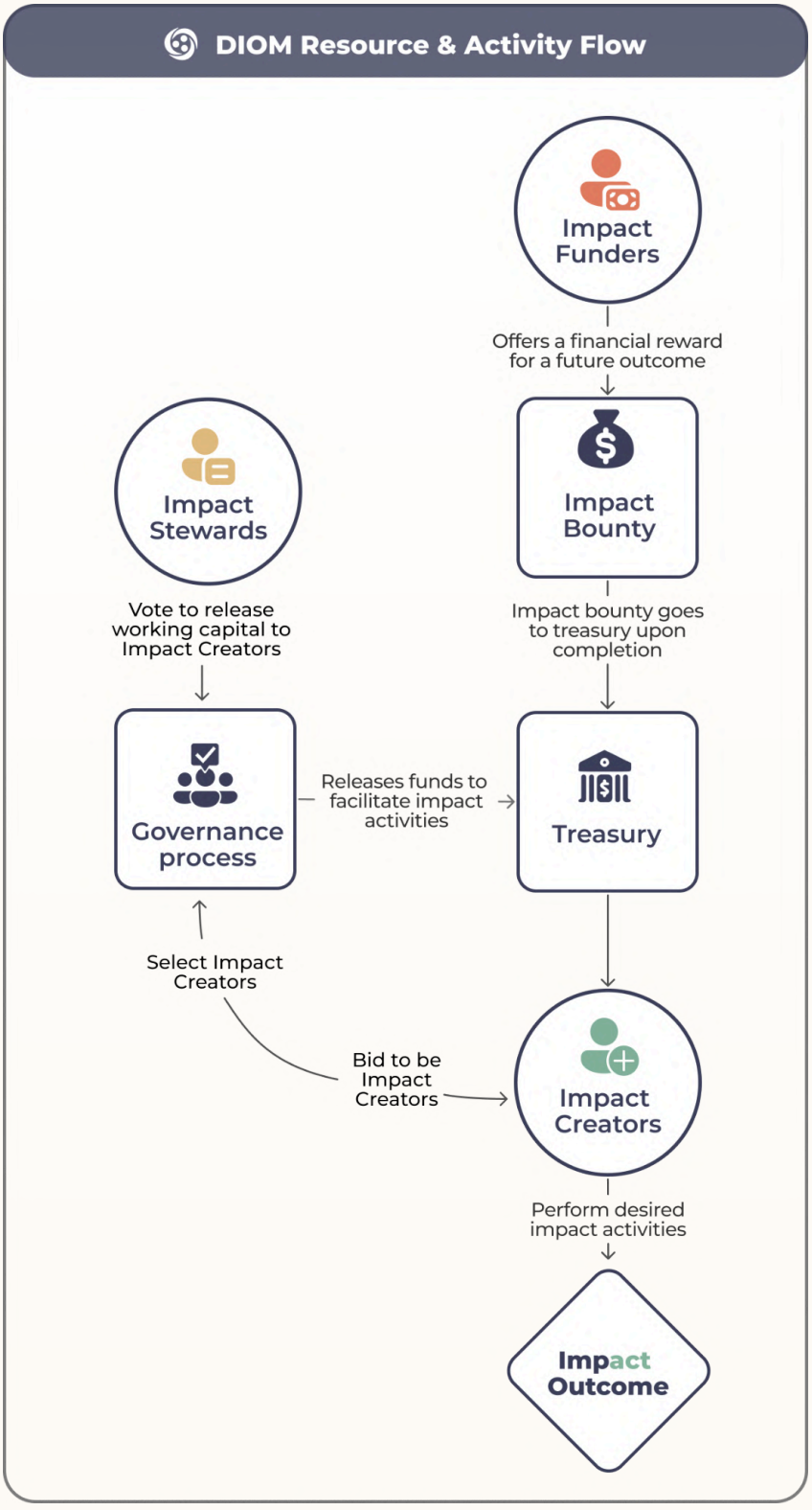

Fig. 10. The flow of resources and activities of DIOM

DIOM in Action – A Real World Example

An international donor wishes to finance the construction of 25 public toilets in a low-income suburb of a city in northern Tanzania. The donor wants the toilets constructed within 6 months, exclusively from local materials, and to a very high standard. Furthermore, the donor wants to see the toilets maintained and serviced for 2 years.

1. This donor, acting as the **Impact Funder**, calculates the socio-economic value of this intervention to be $600,000. This is what the donor (Impact Funder) wishes to pay for this outcome. The Impact Funder sets the Impact Bounty reward accordingly. The Impact Bounty is locked in an escrow account for an agreed duration and DIOM takes care of the rest. The Bounty will be released in 10 equal parts over 2.5 years, assuming all milestones are met and verified.
2. **Impact Creators**, in this case local Tanzanian companies, NGOs, and social enterprises, bid on the Impact Bounty. They showcase their expertise and proposed solutions to Impact Stewards ($MPACT token holders) who govern the decentralized treasury. In this example, three different consortia of Impact Creators submit bids, all between $300k and $400k.
3. **Impact Stewards** vote to select Impact Creators. The Impact Creator with a bid of $400k is selected. Their bid price was high, but they had excellent references. The Impact Stewards concluded that the chance of nondelivery was small. Once selected, the winning Impact Creator gains access to funding of $400,000 from the treasury in pre-agreed tranches.
4. The Impact Creator begins executing the project to deliver the impact outcome in stages.
5. Impact Auditors monitor the progress.
6. Impact Auditors verify the successful completion of each stage.
7. As each stage is positively verified, this triggers the release of part of the Impact Bounty from escrow and into treasury. After all stages are completed, there is a net gain of $200,000 for the treasury.

3. $MPACT Token, Treasury, and Governance

3.1 The $MPACT Token

The first function of the $MPACT token is to serve as a governance mechanism, enabling frictionless collaboration among stakeholders to collectively facilitate, verify, and report on impact outcomes. The second function of the $MPACT token is to capture and reflect the value of the impact generated by the community. As DIOM grows and facilitates more and more successful impact outcomes, the value of the DIOM treasury increases.

As with any Decentralized Autonomous Organisation model, the $MPACT governance token can be traded on decentralized exchanges (DEXes) and swapped for other digital assets. As DIOM gains traction, the token's benefits will likely extend beyond governance and tradability, offering incentives and potential composability with other protocols.

Extensive forecasts were conducted to estimate the token’s price evolution over a 5-year post-TGE horizon. While acknowledging the inherent limitations of forecasting models, especially over such a long period of time, there is critical importance to understanding how the treasury might evolve under diverse market conditions, as its evolution has real world implications. The value redistribution mechanism underpinning DIOM nurtures the long-term growth of the treasury and ultimately leads to a dynamic ecosystem where impact begets value, and value circulates. The $MPACT token is a tradable reflection of that value.

3.2 Revenue Forecast and Impact Treasury Evolution

The role of the treasury is to allocate funding for the execution of Impact Bounties. The primary source of revenue for the treasury is the inflow of executed, verified Impact Bounties. A secondary source of revenue is funds deposited in the treasury which generate interest through yield farming strategies (fiat -> stablecoins). This interest accrues to the treasury and can be reinvested or used to fund additional impact projects.

The following assumptions were made in order to forecast DIOM’s revenue:

1. The primary revenue stream of DIOM is from Impact Bounties.

2. The treasury captures all achieved impact margins, i.e. the difference between the value of any given Impact Bounty and the cost of delivering the verified outcome associated with it.

3. As DIOM demonstrates success in facilitating impact delivery, the duration, number, and size of bounties will increase over time.

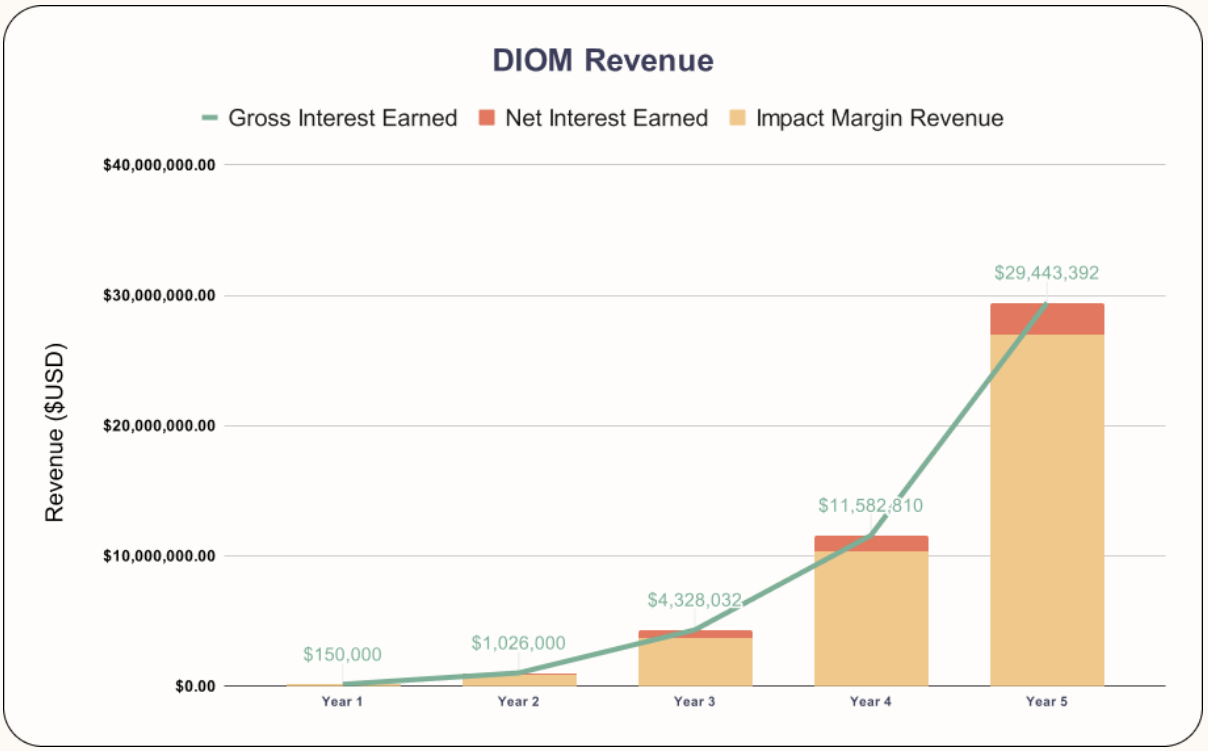

Fig. 11. Revenues Forecast for the Decentralized Impact Outcomes Marketplace

The second inflow is from the interest earned following the conversion of bounties deposited in fiat into stablecoins. Yield is earned to compensate for the opportunity cost of idle capital. The model anticipates declining interest rates in the short to medium term. All the interest earned on escrowed bounties during the bounty's lifetime enters the treasury, less any deductibles payable, such as when a bounty is partially completed.

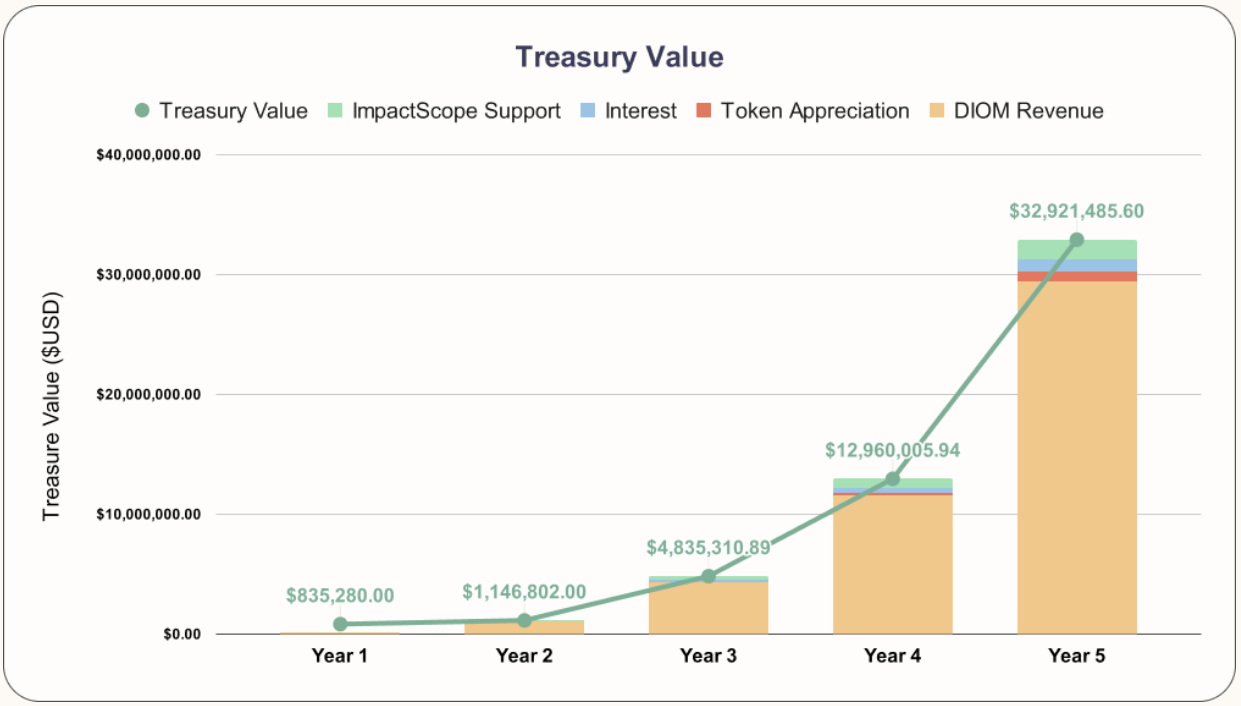

Fig. 12. Treasury Evolution forecasting

A critical assumption guiding these forecasts is that the treasury will initially be bootstrapped by ImpactScope. Forecasts confirm that the value of the treasury is projected to grow, excluding vested reserve tokens in the first two years, as revenue from DIOM strengthens the treasury.

To protect platform stakeholders, and to ensure the vitality of the treasury, a substantial portion of the treasury is allocated to interest-bearing instruments. Some percentage of DIOM's revenue is used to purchase $MPACT tokens on the open market when needed. This ensures that the treasury maintains a targeted distribution of native to stable tokens. These non-native financial vehicles have different durations and compounding periods for maximum liquidity and safety.

The evolution of the treasury is closely integrated with token appreciation scenarios, especially the proportion of revenue used to purchase $MPACT tokens on the open market. The value of the treasury is projected under conservative, moderate, and hyper appreciation scenarios, and the ultimate value of the treasury is derived by summing impact margin revenue, interest earned, and scenario-specific token appreciation.

$$P_t = \frac{Float_{Aggregate} * \left(\frac{Revenue_{Year}}{1-\alpha}\right) * Growth_{Rate}}{((Total_{Supply} * Aggregate_{Sum} * Goodwill) + IPO_{Price}) * AdjustmentFactor}$$

In forecasting the price of $MPACT at any given time, several key variables are important. First, *FloatAggregate*, represents the number of tokens in circulation after factoring in lockup periods. This variable is crucial for capturing the available supply dynamics, which influence token price changes, and is closely related to the *TotalSupply* variable set at 1 billion tokens.

Furthermore, to reflect market dynamics, *Alpha* is used to capture the sensitivity of token price to changes in the strength of the treasury. Alpha is set between 0 and 1. It captures the cyclical but non-linear feedback loop between treasury value and token price, and is grounded on the assumption that this relationship will be more sensitive during bull markets compared to periods of depressed market sentiment.

A catch-all term augments this integration of market sentiment in the price forecasts. *Goodwill* introduces a psychological element to the model, with the intention of reflecting market perception in token pricing. Goodwill is expected to be more favorable during bull markets.

GrowthRate captures three distinct price appreciation scenarios (conservative, moderate, and hyper). This enables a more flexible model with projections based on different expectations of market dynamics.

Overall, these variables combine to form a comprehensive and flexible model for forecasting token prices, while trying to account for the success of DIOM as well as more speculative factors which might impact token price.

FloatAggregate = the number of tokens that are circulating after accounting for any kind of lockup and the proportion of supply that is just held.

Alpha (sensitivity) = the responsiveness of token price to a change in the strength of the treasury. Because we assume a cyclical but non-linear feedback loop between treasury value and token price, we capture this in the form of the variable alpha, a sensitivity factor (ranging between 0 and 1). We furthermore assume that, in bull markets, this sensitivity is higher than during bear markets.

Goodwill = a catch-all term for market sentiment (which we assume to be more positive during bull markets).

RevenueYear = the forecasted revenue of DIOM in a given year.

GrowthRate = captures the 3 different price appreciation scenarios: conservative (30% YoY), moderate (70% YoY), and hyper (190% YoY).

TotalSupply = 1 billion tokens.

AggregateSum = the amount of tokens released in a given year.

Target = an expected token price based on the GrowthRate if we did not control for any broader market factors such as bear market, interest rates, tokens vesting and being released on the open market, etc.

IpoPrice = 0.025.

Adjustment Factor*[2]

[2] The above formula contains an adjustment factor to provide for easier scenario modelling.

3.3 Governance and Decentralized Outcome-Based Financing

The native web3 model enables community-governed management of financial resources. On DIOM, there is no need for a centralized intermediary to manage the flow of funds from Impact Funders to Impact Creators.

Fundamentally, the role of Impact Stewards is to serve as the bridge between the funds allocated (residing in the treasury) and the impact realized by DIOM. From the moment an Impact Funder sets the terms of an Impact Bounty and escrows the requisite capital, Impact Stewards begin to participate in a multiphase informal-to-formal governance process. A final vote by Impact Stewards determines which Impact Creator receives capital from the treasury.

The interests of Impact Stewards are closely aligned with those of Impact Funders, as ultimately the treasury grows bigger with each successfully executed Impact Bounty. $MPACT token holders participate in decision-making processes akin to those of a decentralized autonomous organization (DAO), which, from a legal perspective, mirrors many of the attributes of a Swiss association (verein).

Tokens not only represent decision making rights, they also represent indirect claims on funds in the treasury. Governance decisions are made through transparent and inclusive processes, to ensure fair representation and alignment with DIOM's goals of achieving verifiable impact outcomes.

Embedded in the platform's architecture is a token-based governance model which absolves Impact Funders from administrative burdens during the lifetime of the Impact Bounty. This ensures a decentralized, inclusive, and value-driven approach to achieving impact outcomes. Aligned with the Virtuous Impact Cycle, token-based governance enables the community to co-own ecosystem value and strategically direct protocol funding.

Glossary

Blockchain - A distributed ledger technology (DLT) that allows for the permanent, immutable, and transparent recording of data and transactions through a cryptographically secure digital database of transactions that are stored on a public or private network.

Decentralized Autonomous Organization (DAO) - A member-owned community, usually online, with no centralized leadership structure. DAOs often have their own native DAO tokens, which simultaneously serve as units of community currency and governance instruments.

Decentralization - The distribution of decision-making authority and management responsibilities away from a centralized or top-down authority and toward a larger group of diverse representatives, aiming to improve the efficiency, effectiveness, and responsiveness of information processing, coordination, and decision-making.

Digital Monitoring, Reporting, and Verification (dMRV) - Digital measurement, reporting, and verification (dMRV): Software solutions capable of automated data collection, analysis, validation, and verification. The goal of dMRV is to verify that the data and information presented in reports, statements, or performance measurements are truthful, consistent, and compliant with applicable standards and regulations.

Impact - A positive change in an aspect of people's well-being or the condition of the natural environment caused by an organisation.

Impact financing - Referencing GIIN's definition of Impact Investments, Impact Financing here is defined as financing made to generate positive, measurable social and environmental impact.

Non-fungible token (NFT) - A cryptographic token with a unique digital signature and stored on a blockchain. NFTs are typically artwork, collectibles, or digital twins of real world assets.

Outcome-based financing (OBF) - An umbrella term that describes approaches where payments are contingent on verified results and those where investment terms are linked to achievement of outcomes.

Smart contracts - Programs stored on a blockchain which run when predetermined conditions are met. They are typically used to automate the execution of an agreement so that all participants can be immediately certain of the outcome without any intermediary's involvement or time loss. They can also automate a workflow, triggering the next action when conditions are met.

Tokenization - The process of transforming ownership and rights of particular assets into a digital form recorded on a public ledger.

TGE (Token Generation Event) - The act and the process of issuing tradable tokens to coincide with the launch of a platform or service.

Web3 - A term used to define the new decentralized, permissionless internet where users can read, write, and own data.

References

About the SDGs Impact Standards | UNDP
SDG Impact Standards
Accessed 27 Apr. 2025

Assessment of Digital Measurement, Reporting and Verification | Climate Ledger Initiative
Digital MRV report | Climate Ledger Initiative
Accessed 22 Apr. 2025

Beyond Compliance: Embedding Impact through Innovative Finance | Schwab Foundation and World Economic Forum
Beyond Compliance: Embedding Impact through Innovative Finance
Accessed 10 Mar. 2025

Conviction Voting: A Novel Continuous Decision Making Alternative to Governance by Jeff Emmett | Giveth
Conviction Voting: A Novel Continuous Decision Making Alternative to Governance | by Jeff Emmett | Giveth
Accessed 5 Jan. 2025

ImpactScope Decentralized Impact Marketplace - Case Study Innovative Finance | Schwab Foundation and World Economic Forum
Decentralized Impact Outcomes Marketplace | WEF case study
Accessed 10 Mar. 2025

EU taxonomy for sustainable activities | European Commission (europa.eu)
EU taxonomy for sustainable activities - European Commission
Accessed 5 Feb. 2025

Guide 2024: Taking impact investing to the next stage | Impact Investor
Guide 2024: Taking impact investing to the next stage
Accessed 30 Dec. 2024

Impact Investing - A Brief History by Brian Trelstad
Brian Trelstad - Impact Investing: A Brief History
Accessed 30 Dec. 2024

Impact Investing Market Size to Reach US$4.5T by 2030 | Fairfield Market Research
Impact Investing Market Size to Reach US$4.5T by 2030
Accessed 30 Mar. 2025

Impact Investors Guide | Impact Investor
Impact Investors Guide | Impact Investor
Accessed 5 Jan. 2025

Measuring societal impact: how to go beyond standard publication metrics | Nature
Measuring societal impact: how to go beyond standard publication metrics
Accessed 5 Jan. 2025

Net Zero Tracker
Net Zero Tracker
Accessed 8 Jan. 2025

New rules on corporate sustainability reporting: The Corporate Sustainability Reporting Directive | European Commission (europa.eu)
Corporate sustainability reporting - European Commission
Accessed 5 Jan. 2025

Redefining Value: Innovative Finance for Development | Schwab Foundation and World Economic Forum
Redefining Value: From Outcome-Based Finance to Tradable Impact
Accessed 10 Mar. 2025

Sizing the Impact Investing Market 2024 | GIIN
Sizing the Impact Investing Market
Accessed 30 Dec. 2024

State of the Market 2024: Trends, Performance and Allocations | GIIN
State of the Market Trends
Accessed 30 Dec. 2024

Study on the Non-Financial Reporting Directive: Final Report | Publications Office of the European Union

Study on the Non-Financial Reporting Directive | Publications Office of the European Union
Accessed 30 Dec. 2023

Sustainable AI - How Can Blockchain Help? | Crypto Valley
CVA Sustainability Working Group Releases New Paper on the topic of Sustainable AI | Crypto Valley Association
Accessed 30 Dec. 2023

Swiss Association as a DAO Legal Wrapper | Daobox
Swiss Association as a DAO Legal Wrapper – DAObox
Accessed 5 Jan. 2024

Tradable Impact: A New Frontier for Development Finance?
Redefining Value: From Outcome-Based Finance to Tradable Impact
Accessed 10 Mar. 2025