SDG BLOCKCHAIN ACCELERATOR

Cohort 1 Prototype Feedback Summary Report

1 Purpose of This Document

This report consolidates structured feedback from UNDP Country Offices, technical stakeholders and mentors on prototype submissions developed during the SDG Blockchain Accelerator. For each prototype, we analyze:

- the stated goal of the solution,
- usability and functional maturity,
- alignment with the SDGs and the local development context,
- clarity and current gaps,
- and recommended next steps.

The goal is to capture the status and perceived value of each prototype at this stage, in the words of participating stakeholders and to provide a traceable narrative for project assessment and future accelerator support.

Each subsection below represents one active project pairing between a Solution Maker and a UNDP Country Office.

SDG BLOCKCHAIN ACCELERATOR

2 Project-Level Summaries

2.1 Enhancing Transparency and Accountability in Climate Finance and Carbon Credit Tracking for Tanzania's Net-Zero Nature-Positive Project (NZNP)

UNDP Office: Tanzania

Stakeholder Role Providing Feedback: Programme Associate, UNDP Tanzania

1. Project Overview

The prototype proposes a secure, transparent digital system for issuing, tracking, selling and retiring carbon credits in Tanzania. Its goal is to provide a trustworthy, auditable carbon credit infrastructure linking project developers, government institutions and buyers. The platform aims to address the current fragmentation of carbon finance workflows and to support national climate priorities under the Net-Zero Nature-Positive agenda.

2. User Experience and Functionality

Stakeholders highlighted that the dashboard and transaction view are already strong. The ability to view credits, track issuance and monitor transactions in one place was described as a "game changer" compared to current manual processes.
Key usability considerations raised:

- Onboarding new users still requires simplification for first-time operators.
- Local language support (e.g. Kiswahili) is important to ensure that community and field-level actors can use the system, not just central agencies.
- Some expectations exist around automated pricing benchmarks (e.g. integrating reference prices from standards like Verra), which are not yet embedded.

3. Impact and Relevance

The prototype directly addresses gaps that were previously identified in Tanzania's carbon market: low transparency, weak auditability and limited visibility into how funds flow back to

communities.
The solution is explicitly aligned with:

- SDG 13 (Climate Action): by improving the credibility of carbon finance.
- SDG 15 (Life on Land): by supporting conservation and biodiversity-linked projects.
- SDG 16 (Peace, Justice, and Strong Institutions): by strengthening institutional accountability.
- SDG 17 (Partnerships for the Goals): by creating a shared infrastructure for government, UNDP, and private buyers.

Stakeholders confirmed that the prototype is relevant and timely for national climate governance and ongoing initiatives such as Tanzania's NZNP and blue carbon programs.

4. Clarity and Improvement Areas

Most valuable elements:

- End-to-end traceability of credits (issuance → listing → sale → retirement).
  Visibility of financial flows to beneficiaries.

Areas needing clarification:

- How the platform will align with existing national systems already under development, including the national carbon registry and the VPO's E-Mazingira platform.
- How the system will be integrated into government workflows (not just presented alongside them).
- How pricing and verification will be governed long term.

5. Recommendations and Next Steps

Stakeholders suggested:

- Defining a clear integration pathway with national registries to avoid duplication.
- Adding multilingual UI and community-facing modules to improve accessibility.
- Including benefit-sharing tracking so communities can see how climate finance reaches them.
- Exploring AI-supported modules (for MRV, anomaly detection, etc.) in future iterations.
  There is strong interest in continuing development, with emphasis on institutional integration and capacity building for government teams.

2.2 AFRIKABAL

UNDP Office: Malaysia
Stakeholder Role Providing Feedback: CEO & Founder, AFRIKABAL

Note: The AFRIKABAL prototype in this feedback is described in direct relation to the Sabah hill paddy value chain, under UNDP Malaysia.

1. Project Overview

The prototype demonstrates how programmable, blockchain-backed infrastructure can coordinate rural agricultural trade in Sabah. The core loop is:

1. A farmer lists rice for sale;
2. A buyer commits funds into escrow;
3. Delivery is verified via GPS/USSD;
4. Payment is automatically released to the farmer;
5. The cooperative and logistics actors see a shared record of the transaction.

This framework is intended to eliminate payment delays, reduce exploitation, and create verifiable traceability for high-value produce.

2. User Experience and Functionality

What worked well:

- Farmers can register via mobile app or USSD, making onboarding possible even in low-connectivity environments.
- Escrow logic is visible and understandable: funds are locked and released at delivery confirmation, building trust.
- Cooperatives, buyers, and logistics providers each have their own dashboard with relevant views (orders, custody chain, payouts).
- Blockchain is integrated in the background in a way that does not require farmers to understand technical terms.

Where users struggled:

- Terms like “tokenization”, “escrow”, and “DID” are not always intuitive for first-time rural users.
- Switching between USSD and app/web surfaces some design inconsistency.

- Logistics dashboards would benefit from clearer visual cues (handover checkpoints, alerts, map views).

3. Impact and Relevance

The solution directly targets pain points raised in the challenge: delayed payments, weak traceability and information asymmetry that hurts smallholder farmers.
Documented SDG alignment includes:

- SDG 2 (Zero Hunger): better income and less post-harvest loss.
- SDG 8 (Decent Work & Economic Growth): faster cash flow and fairer pricing.
- SDG 9 (Industry, Innovation & Infrastructure): shared digital rails for trade.
- SDG 10 (Reduced Inequalities): access for low-connectivity, marginalized producers.
- SDG 13 (Climate Action): ability to integrate climate-linked risk protection and parametric insurance.

The feedback frames this prototype not just as a single product, but as market infrastructure for rural trade.

4. Clarity and Improvement Areas

Most valuable:

- Instant, verifiable payment on confirmed delivery.
- Transparent custody trail from farm to buyer.
- Cooperative visibility and role definition.

Less clear / needs iteration:

- How insurance payouts and climate risk coverage will be automated.
- How collective governance (e.g. cooperatives setting floor prices) will function in practice.
- How user education will be delivered at scale.

5. Recommendations and Next Steps

Immediate suggestions from stakeholders include:

- Use simpler farmer-facing language (e.g. “list your harvest with proof” instead of “tokenize your output”).
- Harmonize visual design and flows across USSD, mobile, and dashboards.

- Add multilingual support and voice/USSD guidance to increase adoption among indigenous communities.
  Surface a visual “end-to-end journey” (farmer → buyer → logistics → payout) so all actors understand the process at a glance.

Overall, stakeholders consider this prototype “infrastructure-grade” and ready for structured piloting, given refinements to usability and messaging.

2.3 Sun4School

UNDP Office: Mauritius & Seychelles Country Offices
Stakeholder Roles Providing Feedback: Product Manager (Solution Maker); UNDP Mauritius CO; UNDP technical specialist (Mauritius & Seychelles track)

1. Project Overview

The Sun4School / Sun4Schools prototype is designed as a blockchain-enabled crowdfunding platform for financing solar PV installations in schools. The intended model allows community members, diaspora, and other supporters to contribute in small amounts; funds are allocated to targeted schools; and impact (energy generation and emissions avoided) is made visible through dashboards and reporting.

The solution is positioned at the intersection of renewable energy access, educational infrastructure improvement, and climate accountability.

2. User Experience and Functionality

Strengths noted by reviewers:

- The card-based interface for browsing schools and contribution options is intuitive.
- The dashboards present funding progress, basic CO_2 impact metrics, and school-level project status in a way that is easy to interpret.
- The proposed KYC/KYB flow and ability to enable fractional contributions were viewed as valuable for building trust and regulatory alignment.
  The concept of integrating verifiable identities using SSI (self-sovereign identity) and simulating Cardano-based payments was seen as forward-looking.

Challenges raised:

- The question “what happens if a school doesn’t reach its funding goal?” was not yet clearly handled (refund versus reallocation).

- Several user dashboards were only partially implemented (e.g. government / installer views were missing in this iteration).
- The blockchain backbone, including smart contracts for disbursement, tokenized solar ownership shares, and automated reporting, was still mostly conceptual at this stage, not fully functional in the demo.
- Alignment with UNDP expectations, branding, and calculation logic (kWh, FiT revenue, etc.) needs more refinement in future versions.

3. Impact and Relevance

Stakeholders confirmed that the concept directly addresses core challenges in Mauritius and Seychelles: financing school-level solar deployment, reducing energy costs for public education, and creating pathways for citizen participation in climate action.

The stated SDG alignment includes:

- SDG 4 (Quality Education): freeing budget for educational programs by lowering energy bills.
- SDG 7 (Affordable and Clean Energy): expanding access to solar generation and energy independence for schools.
- SDG 13 (Climate Action): measurable CO_2 reductions from PV deployment.
  Some reviewers also highlighted gender inclusion and participation targets, positioning the platform as a way to democratize access to climate finance.

4. Clarity and Improvement Areas

Most valuable elements:

- The investor / contributor journey is understandable and easy to navigate.
- The impact dashboard helps articulate why this matters.

Areas needing clarification:

- Refund or reallocation logic for partially-funded projects.
- Full integration of blockchain features (wallets, tokenization, automated payouts).
- Consistent UX for all stakeholder roles (ministry, installer, school admin, regulator).
- Incorporation of local regulatory requirements for crowdfunding and energy finance.

Some UNDP stakeholders also raised concerns around responsiveness and alignment during the build, noting that the solution will need closer iterative collaboration to meet compliance expectations in future phases.

5. Recommendations and Next Steps

Suggested next actions include:

- Clearly define and display fund-handling rules (e.g. automatic refund within 30 days if target unmet).
- Implement and demonstrate smart-contract–based disbursement tied to verification milestones (installation, grid connection, energy output).
- Complete all dashboard roles, especially for government oversight and installer reporting.
- Add transparent Power Purchase Agreement / performance reporting logic into the UI.
- Localize interface language(s) and ensure compliance with national crowdfunding and virtual asset regulations.

Despite the current limitations, stakeholders consider the concept strategically important for Small Island Developing States and view it as a viable path toward blended climate finance, provided the missing blockchain logic is delivered.

2.4 zenGate Global

UNDP Office: UN Bangladesh
Stakeholder Role Providing Feedback: Director of Product / Co-Founder, zenGate Global

1. Project Overview

zenGate Global positions itself as a “traceability as a service” layer for supply chains. The goal is to anchor verified agricultural and export data (e.g. vegetables, leather) on-chain to increase trust in Bangladeshi products, improve market access, and help producers meet compliance requirements for international buyers.

2. User Experience and Functionality

The team reported strong engagement with the Country Office and positive iterative feedback. The prototype is API-driven and designed for integration into existing traceability systems rather than replacing them. This lowers adoption friction and supports scale.

The main operational friction is not in the prototype itself, but in identifying the best local implementation partners and driving adoption in sectors where digital traceability is still emerging.

3. Impact and Relevance

The prototype responds to the need for transparent, export-ready traceability aligned with international standards.
It contributes to:

- SDG 8 (Decent Work and Economic Growth): by improving producer credibility in higher-value markets.
- SDG 9 (Industry, Innovation and Infrastructure): by creating interoperable, tamper-evident traceability.
- SDG 16 (Peace, Justice and Strong Institutions): by increasing trust in compliance records and export documentation.

The project is positioned as infrastructure that can be extended to multiple value chains, including agriculture, leather, fisheries, and manufacturing.

4. Clarity and Improvement Areas

Clear points:

- The scope of “what needs to be built” was well understood across stakeholders.

Less clear:

- Identifying the right long-term operational partners in Bangladesh and beyond.
- How to scale the approach rapidly across multiple value chains without diluting quality.

5. Recommendations and Next Steps

Next steps include expanding pilot partnerships with multiple UNDP offices or thematic units, and building early lighthouse deployments that prove measurable value to exporters. The team highlighted the value of the mentorship track and sees structured expansion as a natural next phase.

2.5 Genius Tags

UNDP Office: Malawi
Stakeholder Role Providing Feedback: Mentor, CMO, Tokeo

Important clarification: the “Genius Tags” feedback describes a system for humanitarian funds/voucher distribution and accountability, not a physical tagging-only product. It effectively maps to a financial inclusion / aid delivery stack.

1. Project Overview

The prototype enables digital distribution of humanitarian value (cash, vouchers, aid credits) across multiple countries. It is designed to ensure that assistance reaches intended recipients efficiently, with traceability and accountability. The mechanism supports transparent transfers and aims to reduce leakage.

2. User Experience and Functionality

The stakeholder described the product as already strong, intuitive to use, and practical for near-term application. There is active work underway to clarify governance and visibility in a web3 / blockchain context, but operationally, the flow of voucher-style support is understood.

The main open issue is not usability but business model clarity, specifically, where sustainable revenue will come from.

3. Impact and Relevance

The prototype is seen as directly addressing core challenges in aid distribution such as integrity of flows, targeting, and auditability. The mechanism is applicable in humanitarian settings where cash and voucher assistance must be tracked without fragmentation.

This is relevant to SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities) through improved access to relief; and to SDG 16 (Peace, Justice and Strong Institutions) through transparent aid governance.

4. Clarity and Improvement Areas

Most valuable:

- The clarity of the digital aid distribution flow.
- The ability to administer support across geographies.

Open questions:

- Long-term sustainability of the model.
- Governance clarity around oversight and reporting in a blockchain context.

5. Recommendations and Next Steps

Next steps focus on articulating how revenue is generated and sustained, and on aligning the visibility/audit features with governance expectations of humanitarian partners. The team reports excitement about moving forward.

2.6 AXK LEDGER

UNDP Office: Malaysia
Stakeholder Role Providing Feedback: Founder / CEO

1. Project Overview

AXK LEDGER is described as a programmable coordination layer for rural/agricultural value chains, with dashboards for each actor (farmers, cooperatives, buyers, logistics). Although framed here under "AXK LEDGER," the substance of the feedback matches the same Sabah agricultural supply chain work described for AFRIKABAL. The emphasis is on verifiable logistics, payment certainty, and documented custody.

2. User Experience and Functionality

Stakeholders reported that:

- USSD onboarding for farmers worked in low-connectivity settings.
- Cooperative dashboards provided visibility into aggregation, compliance, and payouts.
- Buyer dashboards exposed provenance, quality, and custody records.
- Logistics dashboards captured handover events and timestamps.

Areas to improve include enhanced visual cues for logistics, better exposure of SDG-related filters for buyers, and additional clarity on dispute handling.

3. Impact and Relevance

The prototype tackles structural issues in informal value chains: payment delays, opaque aggregation, and lack of trusted proof of origin. It is positioned as foundational infrastructure that can support compliance, export readiness, and inclusive market access. Identified SDG contributions include SDG 1, 2, 5, 8, 9, and 13 through fairer livelihoods, transparent trade, and resilience.

4. Clarity and Improvement Areas

Clear:

- Role separation for each actor.
- Escrow logic built on top of Cardano smart contracts.

Needs refinement:

- Buyer-facing export documentation previews.
- Visual “handover heatmaps” for logistics.
- Simple explanations of what is stored on-chain vs off-chain.

5. Recommendations and Next Steps

Stakeholders recommend adding dispute-resolution workflows, localized language support, SDG tagging filters for buyers, and sandbox/training modes for new logistics partners. The overall conclusion is that the prototype is operationally relevant and ready for controlled pilot deployment.

2.7 Green Faso Project

UNDP Office: Burkina Faso
Stakeholder Role Providing Feedback: Programme Analyst, UNDP Burkina Faso

1. Project Overview

The prototype explores a crowdfunding model to finance reforestation and ecosystem restoration in Burkina Faso. The target pilot is 10,000 trees across 10 regions, involving schools, youth groups, and women’s cooperatives. The goal is to prove whether global micro-contributions can reliably finance local environmental work in a way that is transparent and verifiable.

2. User Experience and Functionality

Feedback indicates that the platform is multi-functional and, so far, has incorporated the features discussed with the solution makers. Stakeholders expressed that the current version reflects the expected capabilities.

3. Impact and Relevance

The project is explicitly linked to:

- SDG 13 (Climate Action) and SDG 15 (Life on Land) through reforestation.
- SDG 1 (No Poverty) via income opportunities for local communities.
- SDG 5 (Gender Equality) through structured involvement of women's cooperatives.

The prototype is seen as a pathway to democratize funding for environmental restoration, complementing traditional donor finance with participatory, visible contributions.

4. Clarity and Improvement Areas

Because there were frequent weekly check-ins, stakeholders reported that roles, expectations, and delivery logic have already been clarified. No major outstanding ambiguities were flagged in this round of feedback.

5. Recommendations and Next Steps

No additional recommendations were raised beyond suggestions already addressed during iteration. The current focus is scaling and validating the model in practice.

2.8 ATM+ – Blockchain-Enabled Adaptation Tracking and Fund Management System

UNDP Office: Bangladesh
Stakeholder Role Providing Feedback: Program Analyst, UNDP Bangladesh

1. Project Overview

ATM+ aims to reduce processing time and administrative friction in climate adaptation fund disbursement. It proposes a blockchain-backed system to track, authorize, and transfer funds to climate-vulnerable populations with transparency.

2. User Experience and Functionality

Initial feedback was positive. The prototype covers most real-world disbursement challenges already identified by the Country Office. Stakeholders emphasized that piloting will be essential to refine it further.

One requested enhancement was automation in insurance-related workflows, such as climate shock payouts.

3. Impact and Relevance

The prototype's purpose is directly aligned with resilience-building for vulnerable communities and is considered supportive of:

- SDG 13 (Climate Action).

It strengthens traceability, accountability, and speed in fund delivery.

4. Clarity and Improvement Areas

Most valuable:

- The transparent, automated fund disbursement logic using blockchain as an auditable layer.

Improvement areas:

- Clearer, more automated insurance/compensation mechanisms.
- Planning for resource mobilization to move from pilot to production deployment.

5. Recommendations and Next Steps

Next steps include building out the insurance claim settlement component and securing support to transition from pilot mode into implementation. Resource mobilization is identified as a key practical challenge.

2.9 Circular Zugdidi: Blockchain for E-Waste (ReLoop)

UNDP Office: Georgia
Stakeholder Role Providing Feedback: Head of Exploration (Accelerator Lab), UNDP Georgia

1. Project Overview

The prototype is a blockchain-based rewards mechanism to encourage responsible e-waste disposal in Zugdidi, Georgia. Residents locate certified drop-off points, scan a QR code, submit photo evidence of their deposit, and receive token-based rewards.

2. User Experience and Functionality

A live field test was conducted in Zugdidi. Findings:

- Younger participants (18–40) quickly understood the value proposition and were motivated by rewards.
- Hands-on demonstrations in community settings (e.g. library, electronics retailer) helped adoption.
- The basic flow (scan → upload photo → record deposit) was functional.

Usability pain points:

- Wallet setup was too complex for many users, especially seniors and teenagers. The 24-word recovery phrase, English-only interface, and multi-step flow were barriers.
- Occasional technical issues (slow load, photo upload glitch) were observed.
- Full Georgian translation and more intuitive UI guidance were flagged as critical next steps.

3. Impact and Relevance

The prototype aligns with national and municipal needs around waste management and circular economy.
It supports:

- SDG 11 (Sustainable Cities and Communities) by improving local environmental health.
- SDG 12 (Responsible Consumption and Production) by incentivizing responsible disposal, traceability, and recycling.

Stakeholders concluded that even at this early stage, the system is addressing the stated challenge: getting citizens to participate in e-waste recovery with verifiable proof.

4. Clarity and Improvement Areas

Clear strengths:

- Alignment with municipal partners and local waste-management actors.
- Structured incentive model.

Areas needing clarification:

- Governance and roles in the DAO layer.

- How compliance obligations for waste operators (like PRO Wasteless) will be embedded.
- Technical details around smart bins, data handling, and long-term management responsibilities.

5. Recommendations and Next Steps

Immediate planned improvements include:

- Migrating from a purely web-based experience to a progressive application with automatic wallet creation at registration.
- Full localization (Georgian language, simplified flows).
- Better performance and clearer role definitions.
  The Country Office and partners agreed to continue iterating with these refinements as prerequisites for broader adoption and scaling.

2.10 Risk-Informed Development for Resilience

UNDP Office: Malawi
Stakeholder Role Providing Feedback: Geographic Information Systems Officer, UNDP

This feedback covers two integrated components described by the stakeholder as "Genius Chain" and "Genius Aid."

1. Project Overview

The prototype links two capabilities:

- Genius Chain: a data integrity layer that flags potential duplicate beneficiaries to prevent leakage or fraud in humanitarian aid targeting.
- Genius Aid: a digital distribution mechanism using QR/NFC to deliver assistance transparently and efficiently.

Together, they aim to improve the accuracy, accountability, and fairness of humanitarian payouts in Malawi.

2. User Experience and Functionality

Positive observations:

- Genius Chain's duplicate-flagging feature supports data integrity and makes targeting more reliable.
- Genius Aid's interface for wallet and distribution workflows is clear, structured, and usable in field settings.
- The operational flow (upload lists → verify → distribute) is intuitive for implementers.

Areas to improve:

- Genius Chain currently flags duplicates but doesn't yet resolve them (no automated deduplication).
- First-time users would benefit from inline guidance on how to handle flagged entries.
- Summary dashboards for field teams could increase situational awareness during active distributions.

3. Impact and Relevance

Stakeholders noted that the prototype directly addresses challenges in aid targeting and fund/benefit delivery.
It advances:

- SDG 1 (No Poverty) and SDG 2 (Zero Hunger) by improving delivery of assistance.
- SDG 13 (Climate Action): the platform can, over time, incorporate climate-related triggers for payouts.
- SDG 16 (Peace, Justice and Strong Institutions): through improved transparency, reduced duplication, and auditable transactions.

The model is seen as scalable to other districts and potentially exportable to other humanitarian contexts.

4. Clarity and Improvement Areas

Most valuable:

- The direct link between integrity (Genius Chain) and delivery (Genius Aid).
- The clarity of the QR-based distribution process.

Less clear:

- Automated resolution of duplicates.

- Integration with national registries and government systems, which is seen as strategically important.

5. Recommendations and Next Steps

Key recommendations include:

- Add automated deduplication or assisted-merge features.
- Integrate summary dashboards that track distribution progress and issues in real time.
- Explore direct alignment with Malawi's existing social protection and disaster response systems to increase institutional uptake.

Stakeholders view the prototype as practically valuable and recommend continued piloting and policy alignment.

2.11 KarbonLedger

UNDP Office: India
Stakeholder Role Providing Feedback: Founder and Chairman, TREES

1. Project Overview

The KarbonLedger prototype links environmental restoration work (tree planting, water restoration) to verifiable, on-chain records. The objective is to create trusted, shareable proof of climate impact that does not rely solely on manual reporting.

2. User Experience and Functionality

Stakeholders said the prototype addressed a major historical gap: previously, restoration activities were documented mainly in manual reports. Now, trees planted and interventions carried out can be recorded in a structured, verifiable way.

Early usability feedback focused on simplifying dashboards for different types of users, from local field workers to program managers, so that all participants can interpret and use the system.

3. Impact and Relevance

The solution is seen as directly relevant to:

- SDG 13 (Climate Action) by tracking climate mitigation actions.
- SDG 15 (Life on Land) through biodiversity and reforestation.
- SDG 6 (Clean Water and Sanitation) via watershed and water-body restoration.
- SDG 8 (Decent Work and Economic Growth) by supporting income opportunities and recognition for self-help groups and community labor.

Stakeholders consider the verifiable linkage between action and evidence to be the core value proposition.

4. Clarity and Improvement Areas

Most valuable:

- The ability to "prove work" transparently to partners and supporters.
- Integration of sensor data and blockchain-backed verification to build trust.
  Areas to strengthen:
- Dashboard clarity across multiple user types.
- Mapping / geotagging features to visualize interventions on a map.

5. Recommendations and Next Steps

Next steps include introducing geospatial mapping of planted areas and restored water bodies, delivering a mobile-friendly interface for field staff, and adding multilingual options for community users. Stakeholders agreed that prioritizing simplicity first, then layering in advanced features, is the correct approach.

2.12 Accelerator Lab (Blockchain Supply Chain Transparency)

UNDP Office: Bangladesh
Stakeholder Role Providing Feedback: Head of Exploration, UNDP Bangladesh

1. Project Overview

This prototype focuses on creating blockchain-backed supply chain transparency via API integration with existing e-traceability solutions in Bangladesh. The core objective is to make traceability data immutable, auditable, and trusted by buyers — starting with agriculture but extendable to leather, fisheries, and other export sectors.

2. User Experience and Functionality

Stakeholders stated that the prototype is "fit for purpose":

- It can sit on top of existing systems and add immutable verification instead of forcing a total systems rebuild.
- It is conceptually simple and therefore scalable across value chains.

One complexity flagged is scaling traceability in the field: the blockchain layer is not the barrier; consistent, high-quality data capture on the ground is.

3. Impact and Relevance

The solution is seen as addressing unfair pricing and lack of trust, particularly for smallholder farmers.
It contributes to:

- SDG 16 (Peace, Justice and Strong Institutions): transparent, verifiable records.
- SDG 10 (Reduced Inequalities): helping marginalized producers prove product quality and secure fairer pricing.

4. Clarity and Improvement Areas

Most clear and valuable:

- The API integration concept.

Less clear:

- Data sovereignty and hosting. The current setup may rely on servers outside Bangladesh, which will need to be addressed in a production environment.

5. Recommendations and Next Steps

Recommendations include:

- Introducing a recognizable “blockchain certified” mark to signal verified origin to consumers and importers.
- Coordinating with national authorities and local government stakeholders to build policy alignment early.
- Ensuring data residency/local hosting for scale-up.

2.13 Tentatively: Democratizing Renewable Energy

UNDP Office: Afghanistan
Stakeholder Role Providing Feedback: Lead, UNDP/BMS/OP/CCIT

1. Project Overview

This prototype functions as a proof of concept for integrating Cardano blockchain into a crowdfunding model for decentralized renewable energy. The long-term vision is to support community-scale solar deployment by enabling traceable, tokenized funding flows.

2. User Experience and Functionality

Stakeholders described the technical experience as positive and aligned with the initial intent: to explore donation and tokenization mechanics for community solar. The prototype shows how funding could be raised and tracked for local energy access.

3. Impact and Relevance

The project explicitly aims at affordability, traceability, and local energy sovereignty.
It was noted as directly relevant to SDG 7 (Affordable and Clean Energy) and linked to broader development indicators, including improved access to electricity in fragile settings.

4. Clarity and Improvement Areas

The overall purpose, enabling community-backed solar deployment, is clear. Future work will need to address the operational and administrative pathways for actually moving funds from donors to implementation partners in a compliant way.

5. Recommendations and Next Steps

The next phase will require more detailed integration of smart contract logic for revenue distribution, along with more institutional clarity on how funds move into country programs. No blockers were reported on the technical proof-of-concept side.

2.14 Unicorn.eth

UNDP Office: Nordic Office
Stakeholder Role Providing Feedback: Founder, Unicorn.eth & Giveth

1. Project Overview

The Unicorn.eth workstream focused on two related prototypes:

1. Enabling Cardano-based donations within Giveth.
2. Exploring the operational pathway to convert crypto contributions into fiat funds that UNDP can accept and deploy.

The long-term ambition is to support tokenized micro-solar deployment and other impact use cases, with verifiable funding trails.

2. User Experience and Functionality

From a pure technical standpoint, enabling ADA and USDM donations through Giveth was successful. The major friction point was not technical but administrative: navigating institutional compliance and secure fund transfer into UNDP channels.

3. Impact and Relevance

The prototype is described as foundational for broader goals such as tokenizing micro-solar infrastructure in remote or fragile environments. It is positioned as contributing to a wide SDG set (1, 3, 4, 5, 6, 7, 11, 13, 17) by enabling transparent climate and energy interventions to be financed through decentralized contributions.

4. Clarity and Improvement Areas

Clear:

- Feasibility of accepting Cardano-origin funds in a donation context.

Less clear:

- Institutional process for routing crypto-derived value into UNDP's operational accounts, including compliance, risk, paperwork, and banking constraints.
- Clarity around funding commitments and programmatic follow-through.

5. Recommendations and Next Steps

The feedback emphasizes the need for dedicated administrative support to complement fast-moving technical teams. Stakeholders stressed that, without aligned finance/operations processes on the institutional side, technical readiness alone cannot translate into deployed impact.

2.15 Critical Raw Mineral – Kazakhstan

UNDP Office: UNDP Istanbul Regional Hub
Stakeholder Role Providing Feedback: Challenge Owner, UNDP IRH

1. Project Overview

The prototype explores how blockchain can support pre-financing, traceability, and ESG monitoring within Kazakhstan's critical raw materials sector. The intent is to provide visibility into environmental and social governance factors along the extraction and trade chain.

2. User Experience and Functionality

Stakeholders noted that the team successfully began adapting the concept to Cardano and produced a clear front-end. Questions remain about how closely the prototype maps to real-world operational and regulatory conditions in-country.

3. Impact and Relevance

The prototype is seen as relevant to:

- SDG 9 (Industry, Innovation and Infrastructure)
- SDG 11 (Sustainable Cities and Communities)
- SDG 12 (Responsible Consumption and Production)
- SDG 7 (Affordable and Clean Energy) (in terms of responsible sourcing for energy transition materials)

It supports responsible production narratives and could strengthen transparency in extractive industries.

4. Clarity and Improvement Areas

Clear:

- High-level interface and traceability concept.

Needs more work:

- Grounding in local regulatory frameworks and industry realities.
- Clear articulation of Cardano's added value in this specific governance environment.

5. Recommendations and Next Steps

Further steps include refining contextual alignment with Kazakhstan's industrial and regulatory landscape, clarifying compliance expectations, and strengthening the direct link between the prototype and on-the-ground ESG monitoring practices.

2.16 Blockchain Enabled CETP for Circularity in Water

UNDP Office: India
Stakeholder Role Providing Feedback: Project Manager, UNDP India

1. Project Overview

The prototype focuses on wastewater treatment compliance, using IoT, AI/ML, and blockchain to monitor Common Effluent Treatment Plants (CETPs). The goal is to ensure that pollution control systems function effectively, to generate verifiable performance data, and to support green credit mechanisms.

2. User Experience and Functionality

Stakeholders described the prototype design as strong and aligned with real environmental challenges. The pilot has not yet gone live on the ground, but the conceptual architecture is in place.

3. Impact and Relevance

The solution is directly relevant to:

- SDG 6 (Clean Water and Sanitation)
- SDG 14 (Life Below Water)

It aims to improve water quality, inform investment decisions, and ultimately contribute to healthier ecosystems in heavily polluted river basins.

4. Clarity and Improvement Areas

Stakeholders reported that all core components were well understood, with no major unresolved questions at this stage. The partnership between the technical team and UNDP was described as complementary: blockchain expertise on one side and deep domain expertise in wastewater management on the other.

5. Recommendations and Next Steps

Immediate focus is moving toward real-world pilot implementation, validating system performance, and demonstrating compliance reporting value to public authorities.

2.17 UNDP x Grinplus AegisGrid project with ZECO

UNDP Office: Tanzania (ZECO – Zanzibar Electricity Corporation)
Stakeholder Role Providing Feedback: Acting Manager, Planning / Commercial / Investment, ZECO

1. Project Overview

The prototype supports revenue protection, fraud detection, and service quality improvement in Zanzibar's electricity distribution. The intention is to use blockchain as a tamper-resistant data layer to monitor energy flow, reduce theft, and build trust through transparent metering and reporting.

2. User Experience and Functionality

ZECO described the prototype as practical and relevant to current operational needs. The team acknowledged that understanding blockchain's inner workings will require additional capacity building, but emphasized that the value proposition, reducing technical and commercial losses, is immediately clear.

3. Impact and Relevance

The solution aligns with:

- SDG 7 (Affordable and Clean Energy): by supporting more reliable, transparent energy systems.
- SDG 9 (Industry, Innovation and Infrastructure): through improved operational efficiency and infrastructure trust.

It also supports future plans around net metering, where private producers feed excess energy back into the grid and require auditable accounting.

4. Clarity and Improvement Areas

Most valuable:

- Ability to detect and analyze faults across the production–transmission–consumption chain.

Needs strengthening:

- Real-time visualization, alerting, and reporting tools to help ZECO technical teams act quickly.
- A clearer, more intuitive interface for operational monitoring.

5. Recommendations and Next Steps

ZECO identified digital payments as a high-priority next step. Integrating a seamless top-up/payment mechanism into the prototype would improve revenue collection, reduce leakages, and offer real-time records of customer transactions. The team also highlighted the importance of internal learning to fully leverage the system.

2.18 Verifiable Waste Recovery System

UNDP Office: Armenia
Stakeholder Role Providing Feedback: Executive Director, EcoPack Armenia Producers Responsibility Foundation

1. Project Overview

The prototype (based on Plastiks.io) aims to verify and trace plastic waste recovery and recycling using blockchain. The concept is to build reliable, auditable evidence of waste diversion and recycling outcomes.

2. User Experience and Functionality

The project is still in an early phase. At this stage, the focus has been on information exchange rather than end-user testing.

3. Impact and Relevance

The prototype is positioned as contributing to:

- SDG 6 (Clean Water and Sanitation)
- SDG 9 (Industry, Innovation and Infrastructure)
- SDG 11 (Sustainable Cities and Communities)
- SDG 12 (Responsible Consumption and Production)

By providing transparent tracking of recovery and recycling, the system supports circular economy policy and compliance structures.

4. Clarity and Improvement Areas

Detailed usability feedback is not yet available. No major functional blockers were reported in this round, but deeper pilot validation is still pending.

5. Recommendations and Next Steps

The next step is to move from initial exchange of information toward demonstration of traceability in practice, capturing real waste streams, associating them with verifiable records and presenting results in a form acceptable to regulators and producer-responsibility schemes.

2.19 Recycle It

UNDP Office: Armenia
Stakeholder Role Providing Feedback: Chairman, ISSD NGO

1. Project Overview

“Recycle It” aims to incentivize and document improved waste management and recycling outcomes. The stated goal is clear: promote responsible disposal and link it to measurable, reportable environmental benefits.

2. User Experience and Functionality

At this stage, stakeholders indicated that more time is needed to provide full feedback on usability and experience.

3. Impact and Relevance

The stakeholder noted that, while the high-level goal is understood, they were not fully convinced that the current prototype (in its present state) addresses the decision-making challenges faced by local authorities.
They did, however, reference broad SDG alignment across:

- SDG 3 (Good Health and Well-Being)
- SDG 4 (Quality Education)
- SDG 6 (Clean Water and Sanitation)
- SDG 11 (Sustainable Cities and Communities)
- SDG 12 (Responsible Consumption and Production)

- SDG 13 (Climate Action)
- SDG 14 (Life Below Water)
- SDG 15 (Life on Land)

This indicates an ambition to frame waste recovery not only as a cleanliness issue, but as a public health, climate, and ecosystems issue.

4. Clarity and Improvement Areas

Stakeholders requested additional time to evaluate functionality and to confirm whether the tool meaningfully supports local policy and operational needs. The current level of clarity around decision-support value is still limited.

5. Recommendations and Next Steps

No detailed recommendations were provided in this round. The immediate next step is deeper engagement between the implementing team and the country stakeholders to align on expectations and confirm the operational fit.

3. Overall Observations

Across all prototypes, several recurring themes emerge:

1. Operational relevance is high.
   Country Offices consistently confirm that the prototypes address real pain points: transparency of funds and benefits, traceability of assets and commodities, accountability in public utilities, climate finance integrity, and civic engagement in circular economy models.

2. Usability and onboarding are critical.
   Even where core logic is sound (e.g. escrow for farmers, QR-based e-waste rewards, adaptation fund disbursement), first-time users often struggle with terminology, wallet setup, dashboards, or cross-role navigation. Local language support, simplified flows, and guided onboarding repeatedly appear as requests.

3. Regulatory and institutional integration is the bottleneck.
   Many prototypes are technically sound, but adoption depends on alignment with national systems, compliance frameworks, and established procedures (energy

regulators, ministries, payment channels, registries). This is especially visible in climate finance, utility metering, and crowdfunding.

4. SDG alignment is explicit and valued.
   Stakeholders consistently frame the solutions in terms of measurable SDG contributions, climate action, clean energy access, fair work and livelihoods, decent governance, responsible consumption, and inclusion of vulnerable groups.

5. Next steps are about maturation, not reinvention.
   Most recommendations focus on:

   - completing missing modules (refund logic, insurance payout automation, DAO governance views),
   - strengthening user experience and language localization,
   - clarifying compliance pathways and institutional roles,
   - and moving from concept demo to pilot deployment with real data.

4. Conclusion

The prototypes reviewed in this report collectively demonstrate meaningful progress toward blockchain-enabled transparency, accountability and inclusion across multiple SDG-relevant domains, from climate finance and energy access to agricultural livelihoods, aid distribution, wastewater compliance and circular economy practices.

The feedback captured here provides a clear roadmap for refinement:

- simplify adoption for real users,
- formalize integration with national systems and compliance requirements,
- and build functional pilots that generate verifiable, decision-grade evidence.

This document serves both as an internal reference for continued technical and strategic support, and as an external accountability artifact demonstrating that solution development is being grounded in real UNDP use cases, assessed by directly involved stakeholders and oriented toward measurable, SDG-aligned outcomes.

Annex A. UNDP SDG Accelerator – Stakeholder Feedback Form

Purpose:
This form (link as a reference) was designed to collect structured, qualitative feedback from UNDP Country Offices, Solution Makers, Mentors and other stakeholders who participated in the SDG Blockchain Accelerator. It served as the primary mechanism to evaluate prototype usability, clarity, relevance to SDGs and areas for improvement.

The form was created and administered through Google Forms by EMURGO Labs, and all responses were automatically stored in a consolidated dataset for analysis and reporting.

Section 1. Respondent Details

Field	Description
Email *(Required)*	Respondent's email address. Responses were linked to an organizational contact (e.g., ahmed@emurgolabs.io) for verification.
Project Name you're working with *(Required)*	Name of the prototype/project under review (e.g., *Sun4School*, *AFRIKABAL*, *ReLoop*, *ATM+*).
UNDP Country Office *(Required)*	Country office or regional unit associated with the challenge (e.g., *UNDP Mauritius*, *UNDP Bangladesh*, *UNDP Tanzania*).

Section 2. Stakeholder Information

This section provided context on who submitted the feedback, helping interpret results by role and organizational perspective.

Field	Description
Name & Surname *(Required)*	Full name of the respondent.

Organization *(Required)*	Entity represented, e.g., *UNDP Country Office*, *Solution Maker company*, or *Implementing Partner*.
Role / Function *(Required)*	Position or title (e.g., *Programme Analyst*, *Head of Exploration*, *Product Manager*, *Founder*).

Section 3. Prototype Feedback

Respondents were invited to review the prototype they had interacted with during or after development and provide qualitative feedback across six dimensions:

Category	Question Prompt	Purpose
Prototype Understanding *(Required)*	"In your own words, what do you understand the goal of this prototype to be?"	Assesses clarity of purpose and problem framing.
Usability & Experience *(Required)*	"How was your experience using or viewing the prototype? What worked well, and what was confusing or difficult?"	Captures first-hand impressions of design, functionality, and user experience.
Impact & Relevance *(Required)*	"Do you think this prototype addresses the key challenges you have expressed to the Solution Maker? Which SDGs do you think it contributes to, and why?"	Evaluates alignment between the prototype and the original challenge statement as well as SDG relevance.
Clarity & Value *(Required)*	"What parts of the prototype were most clear or valuable? Which parts were unclear, missing, or could be improved?"	Identifies strong and weak areas of the prototype.
Suggestions / Recommendations *(Required)*	"What improvements or new features would you suggest for the prototype?"	Captures actionable insights for

		refinement or scaling.
Additional Comments *(Required)*	"Any other observations, concerns, or ideas you would like to share?"	Allows for open-ended reflections, contextual insights, and operational suggestions.

Section 4. Administration Notes

- Form platform: Google Forms (hosted within EMURGO Labs workspace)
- Collection period: August–October 2025
- Respondent group:
    - UNDP Country Offices (Challenge Owners)
    - Solution Makers (technical implementers)
    - Supporting partners and mentors
- Data storage: All responses automatically recorded in Google Sheets for compilation, anonymized summaries and inclusion in program milestone reporting. (link for a reference)
- Verification: Respondent identity validated through organization-linked email accounts.
- Confidentiality: No sensitive or personal data beyond professional identifiers was collected.