VeriCycle

Verified Value for a Circular Economy

The Problem

South Africa has **90,000+ informal collectors** who recover **80-90%** of all packaging waste yet remain unbanked. This is a **verified humanitarian and economic crisis** that requires a Web3 solution.

Economic Exploitation

They are trapped in an untrustworthy, cash-based system with no transparency or fair pay.

Social & Financial Exclusion

This system offers no formal financial history. They are invisible to banks. No proof of income = no bank loans, no credit, no future.

A "Bad & Big" Problem

This is a systemic failure that traps generations in poverty and stunts the growth of a vital circular economy.

The Solution

- **The web3 platform that replaces an untrustworthy cash system with a verifiable, token-based reward**

A Digital Wallet for Every Collector

We provide an easy-to-use app that automatically creates a secure Hedera account for every user.

Instant, Fair Rewards

Collectors earn "EcoCoin" (an HTS token) for every drop-off, replacing vague cash payments.

The "Proof of Income" Report

This is our key innovation. Using HCS, we create an immutable, auditable log of their earnings, a document they can take to a bank.

Why This Problem Demands a Hedera-Based Solution

A standard Web2 'points app' cannot solve this. Trust is the problem. Verifiability is the only answer.

The Immutable Logbook

The HCS is the only tool that lets us build a low-cost, high-throughput, and permanent logbook. This is the Proof of Income. It is the trust layer that Web2 cannot provide.

Token & Account Services

HTS allows feasible micro-transactions for rewards (no high gas fees), and the Account Service lets us instantly create a wallet for every user, onboarding thousands to Hedera.

The Sustainability Track

We are on the Sustainability track. Hedera's low-carbon, energy-efficient network is the *only* responsible choice for an ecological project.

Instant Finality

A collector gets paid in 2-3 seconds. This instant gratification builds the trust that the cash system broke.

The VeriCycle User Journey

01 — Sign Up & Auto-Wallet

Collector signs up. A Hedera account is instantly created for them in the background

02 — Drop-off & Scan

The collector shows their QR code. Centre scans it.
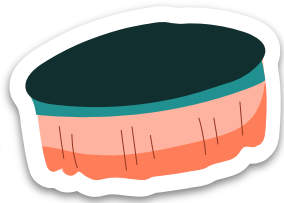
03 — Verify & Reward

Centre verifies the weight. EcoCoin is transferred via HTS, and the record is submitted to HCS.
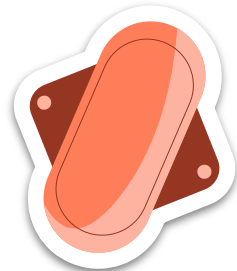
04 — Redeem via HashPack

The collector imports their VeriCycle wallet into HashPack, swaps their EcoCoin for HBAR/USDC on a DEX (like SaucerSwap), and cashes out to their bank. This is a feasible, working, Web3-native cash-out path.

Live Product Demo

- Click Here to Watch the Full Demo on YouTube: https://youtu.be/Tj-i2-C7dGQ

- Live App Link: https://vericycle.onrender.com

- Demo Account:
  - **Demo Login:** demo@vericycle.com
  - **Password:** H3dera!2025

- Demo Account:
  - **Demo Login:** mpact@vericycle.com
  - **Password:** Centerh3dera!

Future Roadmap: From App to Infrastructure

This MVP is the foundation. The mock-ups simulate the next logical steps.

Launch Smart Logistics

Build a logistics engine using our 'Request Pickup' data. This optimizes routes, making recycling convenient and profitable while fighting public litter.

Finalize Bank API

Our current model uses HashPack/DEXs. Our future plan is to use our user data to build a direct EcoCoin -> ZAR API, streamlining the redemption from a 4-step process to a 1-click button.

Roadmap & Business Model

B2G Revenue Model: We charge municipalities a Data Service Fee (R0.10/kg) for verified waste diversion reports, saving them millions in landfill costs.

Sustainability Model (How We Scale)

- **B2G Data Fees:**
  - We charge municipalities a Data Fee of $0.01/kg for verified waste diversion reports.
  - Impact: At 100 tonnes/day, this generates ~$1,000/day while saving cities millions in landfill costs.
- **EPR Credits (B2B):**
  - We sell "Verified Plastic Credits" to brands (e.g., Coca-Cola) at $30 per tonne for regulatory compliance.
- **Financial Leads (B2B):**
  - Banks pay a $3.00 Referral Fee for every unbanked collector verified via our "Proof of Income."
  - Opportunity: 90,000 users = $270,000 immediate revenue potential..

Note: These figures represent the South African Minimum Obtainable Market. The platform is designed to scale to the 20 million informal recyclers globally.

A Global Blueprint for Incentivized Recycling

- This isn't just a South African solution; it's a global model.
  - **It's for Everyone**: VeriCycle's model is a universal incentive. It empowers informal collectors who do this for a living, but it also rewards formal households who already recycle and encourages new people to start.
  - **The Model is Universal**: The problem of "incentive vs. convenience" is global. Our Hedera-based blueprint—a trusted, low-cost, verifiable rewards system—can be deployed in any city worldwide.
  - Network Impact: Recycling is high-frequency. 90,000 Users x 5 Daily Drops = 450,000 Daily Transactions on Hedera Consensus Service.

On-Chain Proof

- The project is live and auditable on the Hedera Testnet.

- EcoCoin (HTS): https://hashscan.io/testnet/token/0.0.7189125
- VeriCycle Logbook (HCS): https://hashscan.io/testnet/topic/0.0.7191601
- VeriCycle Operator Account: https://hashscan.io/testnet/account/0.0.7108458
- HTS Token Script: https://github.com/commit-to-Noma/VeriCycle/blob/main/create-token.js
- HCS Logbook Script: https://github.com/commit-to-Noma/VeriCycle/blob/main/logbook.js
- HCS Record Script: https://github.com/commit-to-Noma/VeriCycle/blob/main/submit-record.js
- Account Creation Script: https://github.com/commit-to-Noma/VeriCycle/blob/main/collector-account.js
- Token Transfer Script: https://github.com/commit-to-Noma/VeriCycle/blob/main/transfer-reward.js

THANK YOU!

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