Plastiks DApp – Functional Overview

Core DApp Functionality

The Plastiks DApp is designed to track plastic credit sales, manage escrowed stablecoins, and ensure funds are distributed fairly and transparently and according to the rules of our methodology. It integrates seamlessly with app.plastiks.io and enables automated, blockchain-based transactions while maintaining full visibility over roadmap progress.

1. Roadmap Tracking & Escrow System

- When a plastic credit is sold on app.plastiks.io, tokens are sent to the seller of the plastic credits (the recovery entity).

- The DApp tracks plastic credit sales linked to a specific roadmap and custodies funds related to those sales.

- Once all plastic credits linked to a roadmap are sold, the corresponding funds are held in escrow until the recovery entity returns the Plastik tokens to Plastiks.io.

- Two possible fund release mechanisms for discussion:

    1. Automatic Release – The entity's wallet is automatically connected, and Plastik tokens are automatically sent back from said wallet to DAPP when the roadmap reaches 100% completion, triggering the release of stablecoins from the escrow wallet to the wallet of the seller of the plastic credits.

    2. Manual Release – The entity must manually connect their wallet to the DApp and click a "Release Funds" button to send their Plastik tokens back to Plastiks.io, triggering the release of stablecoins from the escrow wallet.

- If no funds are available for release, the system must flag the missing funds. In this case, notification must be sent to the creator of the roadmap that funds have not been transferred.

- The seller's wallet (which receives the funds) must be the same wallet linked to the roadmap—both wallets are automatically connected to prevent manual input.

2. Blockchain & Stablecoin Management

- The system must support multiple blockchain networks, including Cardano and Celo.

- The DApp must automatically identify the correct blockchain and send the appropriate stablecoin:

    - USDM (Cardano)

    - USDC (Celo)

- The release of stablecoins happens only when the entity returns their Plastik tokens, either automatically or manually as described above.

- Admin oversight ensures stablecoins are manually sent to the escrow wallet when additional funding is required. (alert for the admin to exchange tokens for stablecoins and send them to the escrow wallet)

3. Admin Panel & Financial Oversight

The admin panel provides a real-time view of roadmap funding and transaction status, allowing the Plastiks team to:

- The DAPP must send notifications to Nozama Tech to send stable coin to escrow each time plastic credits are sold and tokens are sent to the seller wallet.

- Monitor the status of each roadmap to determine if additional stablecoins need to be sent to the escrow wallet.

- Track the difference between:

    1. Plastik tokens allocated to a roadmap

    2. Stablecoins available in the escrow wallet for that roadmap

- Manually send stablecoins to the escrow wallet when funds are needed.

- Ensure the release of stablecoins occurs only when Plastik tokens are returned by the recovery entity.

4. Roadmap Dashboard & Public Transparency

- The DApp will feature a dashboard displaying roadmap progress with filtering options:

    o Newest to oldest

    o Highest to lowest recovered plastic (kg)

- Progress bars will visually represent the percentage of plastic credits sold for each roadmap.

- Public access:

    o Anyone can view roadmap progress bars with a link to the roadmap on app.plastiks.io.

    o Anyone can view funds custodied by the DApp for each roadmap.

5. Transactional Token Buy-Back & Plastik Token Utility

- Each time a plastic credit is sold and funds are sent to the DApp for custody, 2% of the funds are sent to a DEX to buy Plastik Tokens at market price.

- Purchased Plastik Tokens are sent to a retirement wallet, ensuring a permanent supply reduction.

- A plastic equivalency counter will display the total amount of plastic recovered based on token retirements.

- This impact section can be shared on social media for visibility and engagement.

6. Community Engagement & Governance

- Plastik token holders can initiate a voting campaign to propose changing the transaction fee from 2% to 5% for a period of 30 days.

- Requirements to trigger a vote:

    - A wallet must hold at least 100,000 Plastik Tokens.

- Voting rules:

    - Campaigns last a maximum of 10 days.

    - A minimum of 2% of total Plastik token issuance (2,000,000 tokens) must vote.

    - A 51% majority is required for the change to be accepted.

- The voting process will be fully transparent, with a progress bar displaying live results.